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1989

DIGBY J. McLAREN

President of the Royal Society of Canada 1987-1990
Président de la Société royale du Canada 1987-1990

THE ROYAL SOCIETY OF CANADA

The Royal Society of Canada is a national academy whose object is the promotion of learning and research in the arts and sciences. It was founded in 1882 by the Governor General of Canada, The Right Honourable the Marquess of Lorne, and is incorporated by an Act of the Parliament of Canada of 1883.

It is organized into three Academies:

Académie I: L'Académie des lettres et des sciences humaines de la Société royale du Canada

Academy II: Academy of Humanities and Social Sciences of the Royal Society of Canada

Academy III: Academy of Science of the Royal Society of Canada

To fulfil its object it:

- elects distinguished scholars to its membership;
- awards medals and prizes for excellence in learning and research in the arts and sciences;
- organizes an annual meeting at which papers are presented on all aspects of learning and research, and which usually includes a symposium on a topic of concern to all three academies of the Society;
- publishes *Transactions*, *Proceedings* and *Calendar* annually;
- organizes regional, national, and international symposia on topics of current interest and importance, usually with strong participation from several disciplines;
- publishes the proceedings of symposia when it is appropriate;
- undertakes national and international projects of various kinds for the advancement of learning and research.

LA SOCIÉTÉ ROYALE DU CANADA

La Société royale du Canada est une académie nationale qui a pour objet de contribuer au développement du savoir et de la recherche dans les arts et les sciences. Fondée en 1882 par le Gouverneur du Canada, le très honorable marquis de Lorne, elle a été constituée par loi du Parlement canadien en 1883.

La Société comprend trois académies:

Académie I: L'Académie des lettres et des sciences humaines de la Société royale du Canada

Academy II: Academy of Humanities and Social Sciences of the Royal Society of Canada

Académie III: L'Académie des sciences de la Société royale du Canada.

Les objectifs de la Société sont:

- l'admission par voie d'élection d'auteurs distingués;
- l'attribution de médailles et de prix pour récompenser le haut savoir et la recherche dans les arts et les sciences;
- la tenue de réunions annuelles où l'on présente des communications traitant de tous les aspects du savoir et de la recherche, et qui comprennent habituellement un colloque sur un sujet apte à intéresser les trois académies de la Société;
- la publication chaque année des *Mémoires*, des *Délibérations* et de l'*Annuaire*;
- la tenue de colloques internationaux, nationaux et régionaux sur les sujets d'actualité importants, ordinairement à caractère interdisciplinaire;
- la publication des comptes rendus de colloques d'intérêt général;
- divers projets d'ordre national et international visant à encourager le savoir et la recherche.

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The Royal Society of Canada
La Société royale du Canada

FOUNDER/FONDATEUR: THE RIGHT HONOURABLE MARQUESS OF LORNE, K.T., etc. *(when Governor General of Canada in 1882) (lorsqu'il fut Gouverneur général du Canada en 1882)*

PATRON: HER EXCELLENCY THE RIGHT HONOURABLE JEANNE SAUVÉ, P.C., C.C., C.M.M., C.D., GOVERNOR GENERAL OF CANADA
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MEMBERS OF COUNCIL 1989-90
MEMBRES DU CONSEIL 1989-90

The Council of the Society consists of the aforementioned officers of the Society and of the Academies, together with the following members:

Le Conseil de la Société se compose des membres du bureau de la Société et des Académies ainsi que des membres dont les noms suivent:

Honorary Editor/Directeur des publications: John M. Robson, B.A., M.A., Ph.D.
Honorary Librarian-Archivist/Bibliothécaire-archiviste: Guy Sylvestre, O.C., L.Ph., M.A., D.Litt., D. Bibl.
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Awards Chairperson/Président de médailles: Denis M. Shaw, B.Sc., M.Sc., Ph.D.
Counsellor/Conseiller: D.G. Hurst, B.Sc., M.Sc., Ph.D.

Additional members/Membres additionnels:

J.C. Hardy, B.Sc., M.Sc., Ph.D.
Margaret McCully, B.S.A., M.S.A., Ph.D.
L.A. Myzak, B.Sc., M.Sc., A.M., Ph.D.

COMMITTEES AND FELLOWS 1989-90
COMITÉS ET MEMBRES 1989-90

Members of committees of the Society and of the Academies are listed in the 1989-1990 *Calendar*/Les noms des membres des comités de la Société et des Académies paraissent dans la brochure intitulée *Annuaire*, 1989-1990.

The list of Fellows will be found in the *Calendar*/La liste des membres paraît dans *l'Annuaire*.

Report of the Honorary Secretary for the Year

1988-1989

COUNCIL ACTIVITIES/ACTIVITÉS DU CONSEIL

The Council met four times and the Executive seven times. An account of the year's business including the audited financial statement is given in the Report of Council which was distributed to all Fellows.

The academies reported the election of sixty-two persons. The names, categories and citations of the Fellows elected are given in the report of the Annual Meeting below.

The Society awarded the Chauveau Medal to John M. Robson; the Sir William Dawson Award to Henry G. Thode; the Thomas W. Eadie Medal to Ashok K. Vijh; the Jason A. Hannah Medal to Jay Cassel; the Innis-Gérin Medal to Albert Faucher; the McLaughlin Medal to Samuel Solomon; the Willet G. Miller Medal to William Henry Mathews; the Lorne Pierce Medal to Maurice Lemire; the Rutherford Medal in Chemistry to Peter A. Hackett; the Rutherford Medal in Physics to Nathan Isgur; and the Henry Marshall Tory Medal to Boris Stoicheff. The citations appear on pages 33 to 38.

The Society received 13 applications for the NATO Research Fellowship which were dispatched to Brussells. David G. Haglund and James D. Macintosh were selected.

The Sir Arthur Sims Scholarship has been awarded to Mark Robert Mullins for the academic year 1989-90.

ANNUAL MEETING/ASSEMBLÉE ANNUELLE

The Annual Meeting was held on 4 to 7 June 1989 in Ste-Foy, Québec, where the Society was received by Université Laval. Those present were:

ACADÉMIE I

Arbour, Roméo; Bélanger, Gérard; Bouchard, Gérard; Brazeau, Jacques; Brière, Germain; Camu, Pierre; Caparros, Ernest; Dehem, Roger; Demers, Jeanne; Deschênes, Jules; Dion, Gérard; Faucher, Albert; Gagnon, Jean-Louis; Guindon, Hubert; Hamelin, Louis-Edmond; Hébert, Gérard; Hurtubise, Pierre; Klimov, Alexis; Kattan, Naïm; Laforte, Conrad; Lamontagne, Léopold; Lebel, Maurice; Légaré, Jacques; Lemire, Maurice; Mailhot, Laurent; Marcil-Lacoste, Louise; Marquis, Paul-Yvan; Moisan, Clément; Paquet, Gilles; Pharand, Donat; Sabourin, Louis; Sylvestre, Guy; Verge, Pierre.

ACADEMY II

Braybrooke, David; Brown, Robert Craig; Cook, Ramsay; Ellis, Keith; Ericson, Richard; Forer, Arthur; Friedland, Martin; Grayson, A. Kirk; Halpenny, Francess G.; Harris, Henry S.; Hogg, Peter W.; Krótki, Karol; Labarge, Margaret; Laponce, J.A.; Leith, James A.; Mallory, James; McConica, James; McKay, Alexander G.; McMaster, Juliet; McRae, Kenneth; Meisel, John; Millgate, Jane; Milligan, Larry Patrick; Neatby, H. Blair; Nelles, Henry; Robson, John M.; Russell, Peter; Suedfeld, Peter; Thomas, Clara; Trofimenkoff, Susan Mann; Tushingham, A. Douglas; Waite, P.B.; Wevers, John W.; Wittlin, Curt.

ACADEMY/ACADÉMIE III

Atack, Douglas; Barnes, C.R.; Batten, Alan; Blais, Roger; Bousfield, Edward; Carbotte, Jules P.; Carroll, Kenneth; Carswell, Alan; Costain, Cecil; Csörgó, Miklos; Dales, Samuel; David, Michel; Derry, Douglas; Eales, Geoffrey; Evans, Wayne F.J.; Folinsbee, Robert E.; Grant, William F.; Hardy, John C.; Hume, J.N. Patterson; Hurst, Donald G.; Hyndman, Roy D.; Isgur, Nathan; Karl, Gabriel; Kendrick, Bryce; Kenney-Wallace, Geraldine; Kerwin, Larkin; La Rochelle, Pierre; Leroy, Claude; MacLeod, Robert; MacPhail, Moray; Margolis, Bernard; Mathews, William; McCulloch, E.A.; McCully, Margaret; McLaren, D.J.; McLennan, Hugh; Mysak, Lawrence; Newman, B.G.; Nicholls, Ralph; Païdoussis, Michael; Peterson, Larry; Pounder, Elton R.; Ramsay, Donald; Robertson, John; Robinson, Gilbert B. de B.; Robson, John M.; Rochester, Michael; Salter, Robert B.; Scott, Steven; Scriver, Charles R.; Shaw, Denis M.; Shemilt, Leslie W.; Simpson, John; Smirnoff, Wladimir; Solomon, Samuel; Steeves, Taylor A.; Stewart, Cameron; Stewart, Robert W.; Stoicheff, Boris P.; Suedfeld, Peter; Thode, Henry G.; Thompson, John E.; Uishi, Hiroomi; Underhill, Anne B.; Vanier, Jacques; Vijh, Ashok.

GENERAL MEETING/ASSEMBLÉE GÉNÉRALE

The General Meeting was held at 20:00 on Sunday, 4 June, 1989, in the Theatre of the Administrative Sciences Hall of Université Laval.

Dr. Michel Gervais, Rector of Université Laval, welcomed the Fellows and their guests. The President of the Society thanked Dr. Gervais, after which he invited the Presidents of the three Academies to introduce the new Fellows whose citations appear below.

ACADÉMIE I

MADELEINE BLANCHET, Docteur en médecine et Présidente, Conseil des affaires sociales, est vite passée du service à l'individu au service à la société. En effet, c'est en santé publique qu'elle poursuivit ses études supérieures, une santé publique qui dépassa vite les aspects thérapeutiques pour cerner les dimensions préventives et épidémiologiques. Ses premières recherches en nutrition furent suivies de recherches et de réflexions sur la santé des populations, des femmes et des enfants en particulier. Elle développa des indicateurs de santé qu'elle se chargea de "vendre" non seulement à ses collègues mais aussi aux dirigeants politiques en leur soumettant de nombreux avis à titre de présidente du Conseil des affaires sociales et de la famille. La Société royale du Canada doit se féliciter de pouvoir l'accueillir en ses rangs comme quelqu'un qui a bien su allier la science et la politique, toutes deux dans leur sens le plus noble.

GERMAIN BRIERE, professeur titulaire et secrétaire, Faculté de droit, Section de droit civil, Université d'Ottawa, est un des grands civilistes contemporains. Maître de juristes, son enseignement a grandement débordé les salles de cours car par ses écrits - les neuf éditions de son ouvrage *Les successions ab intestat*, les huit des *Libéralités*, ainsi que les nouvelles éditions portant les titres *Précis sur les successions* et *Donations, substitutions et fiducie* (1988) - il a touché presque toutes les générations de futurs juristes qui ont fréquenté les facultés québécoises depuis 1968. Son influence ne s'est pas limitée aux étudiants; l'ensemble de la communauté juridique profite de sa science et de son expérience. Maître de juristes il l'a été aussi au niveau des études graduées : une demi-douzaine de ses dirigés sont aujourd'hui professeurs dans les facultés de droit. Peu de juristes québécois peuvent en dire autant. Collaborateur assidu de nombreuses revues juridiques, conférencier recherché notamment dans les congrès internationaux, il a exercé un rôle de pionnier dans l'interprétation des réformes du Code civil. Il a aussi apporté une contribution importante à l'administration universitaire comme directeur des études (1960-1962), doyen (1965-1967), secrétaire

général (1972-1973) et secrétaire (1970-1972 et 1979-1983 et 1985-1988), à Ottawa, Chicoutimi et Montréal.

JEAN-CLAUDE DUBÉ, professeur titulaire, Département d'histoire, Université d'Ottawa, est un de nos rares spécialistes d'histoire sociale et d'histoire des institutions de la Nouvelle-France et de la France d'Ancien Régime. A travers de nombreux articles, mais surtout trois ouvrages majeurs parus ces dernières années, il a profondément renouvelé notre connaissance du monde des administrateurs coloniaux, des intendants en particulier. Les recherches qu'il poursuit présentement laissent prévoir des résultats tout aussi intéressants et probants pour ce qui est de deux autres catégories d'administrateurs coloniaux : les gouverneurs et les évêques de la Nouvelle-France.

JACQUES HÉTU, Directeur, Département de musique, Université du Québec à Montréal, est l'auteur d'une cinquantaine de partitions pour diverses formations instrumentales et vocales qui sont régulièrement exécutées au Canada et à l'étranger et qui démontrent un solide métier, une inspiration toujours renouvelée même si ses oeuvres ne se rattachent à aucune école. Il est aussi un pédagogue renommé. Radio Canada International publiera une anthologie sonore comprenant dix-sept de ses oeuvres majeures. Son talent de créateur et le rayonnement de son oeuvre en font un candidat de choix.

ROBERT LACROIX, Doyen, Faculté des arts et des sciences, Université de Montréal, nous a donné jusqu'à maintenant onze volumes et une cinquantaine d'articles. Près des deux tiers de ses contributions ont porté sur l'économie du travail et des ressources humaines. On peut affirmer qu'il se trouve peu de chercheurs canadiens qui aient consacré autant d'énergie que R. Lacroix à l'analyse de la détermination des salaires et l'application de la théorie économique à l'activité de grève. Il faut ajouter que M. Lacroix a su conjuguer un service à la communauté universitaire de l'Université de Montréal et à la communauté scientifique canadienne en général avec une production scientifique qui ne s'est jamais démentie tout au cours des années, ce qui témoigne d'une remarquable discipline personnelle et d'un extraordinaire sens de l'organisation du travail.

PIERRE LÉON, professeur titulaire, Laboratoire de phonétique expérimentale, University of Toronto, a été un pionnier de la recherche sur le français de France et du Canada, de même qu'un des tout premiers animateurs de la recherche sur un domaine nouveau et difficile de la linguistique, la prosodie des langues. Ses travaux sur la stylistique de la langue parlée sont aussi d'avant-garde, aussi bien en Europe qu'en Amérique. Il

est l'auteur de quelque quatre-vingt articles et de dix-huit volumes sur ces points. Ses travaux restent toujours d'une très grande utilité.

CLAUDE LÉVESQUE, professeur titulaire, Département de philosophie, Université de Montréal, prenant pour thème de réflexion et d'analyse les phénomènes de création littéraire et d'écriture. Il a poursuivi des recherches importantes au confluent de la philosophie, de la psychanalyse et des lettres. Parmi ses ouvrages, signalons : *L'étrangeté du texte, L'oreille de l'autre* (en collaboration avec C.V. McDonald), et *Dissonance. Nietzsche à la limite du langage*. Son rôle de promoteur de recherches interdisciplinaires est aussi de calibre exceptionnel.

SERGE LUSIGNAN, professeur, Institut d'études médiévales, Université de Montréal, a très tôt conquis une position originale parmi les universitaires québécois engagés dans les recherches sur le Moyen Age. Son oeuvre, déjà relativement considérable, s'est développé selon trois axes: 1) des études sur Vincent de Beauvais, philosophe du XIII^{e} siècle, dont les écrits constituent pour nous un monument-clé de la culture médiévale (d'ores et déjà Serge Lusignan est considéré par les médiévistes comme l'un des spécialistes les plus compétents dans ce domaine); 2) des travaux touchant aux problèmes épistémologiques relatifs à l'emploi de l'ordinateur dans les études médiévales et, en général, dans les sciences humaines; et 3) un ensemble de publications et de projets de recherche collective, relatifs à la grammaticalisation des langues vulgaires: problématique située au carrefour de l'histoire des idées, de celle des mentalités et de celle de la langue. Un des ses livres importants, *Parler vulgairement*, a ouvert ici une voie de recherche destinée à un grand avenir.

FRANÇOIS RICARD, professeur titulaire, Département d'études françaises, McGill University, connu à la fois comme universitaire et comme écrivain, est un des intellectuels québécois les plus respectés de sa génération. Auteur de six volumes, dont l'un a mérité le Prix du Gouverneur général du Canada, et de nombreux articles et études, il s'est distingué depuis quinze ans comme critique littéraire, comme chercheur, comme historien, comme essayiste, comme directeur de revue et éditeur. Ses travaux sur Gabrielle Roy, notamment, font autorité. Consacrées récemment par une bourse Killam, sa compétence et sa contribution aux études littéraires québécoises et canadiennes sont unanimement reconnues au pays aussi bien qu'à l'étranger.

CÉLINE ST-PIERRE, professeure titulaire, Département de sociologie, Université du Québec à Montréal, depuis 1969; M.A. de l'Université de Montréal; doctorat de l'Université de Paris (Nanterre); Secrétaire-trésorière de la Société canadienne de sociologie (1965-1968); membre

du comité exécutif de l'ACSALF (1970-1971); secrétaire de l'Association internationale de sociologie (1974-1979); membre du comité exécutif de l'AIS (1986-1990); directrice des études avancées (M.A. et doctorat) du Département de sociologie de l'UQAM (1982-1984). Elle a publié en collaboration : *Les stratégies de reprise*, éd. Albert St-Martin, Montréal, 1984; *Histoire du mouvement ouvrier au Québec 1826-1976*, CSN-CEQ, 1981; version anglaise : Black Rose Press, 1987. En outre elle a publié une quarantaine d'articles.

ACADEMY II

ROBERT BOTHWELL, Department of History, University of Toronto, is a major figure in the writing of Canadian history. A master of the telling phrase, Bothwell established his reputation by books on Lester Pearson and C.D. Howe, on Canada 1900-45 and 1945 to the present, and on Atomic Energy of Canada and Eldorado Nuclear. His expertise extends from business history to foreign policy, and from Ontario provincial history to biography.

KURT DANZIGER, Professor of Psychology, York University, is an authority in the history of psychology, with special expertise in the history of research methodology and psychological experiment. He has also investigated the concept of socialization. His latest book, on *Constructing the Subject: Historical Origins of Psychological Research*, integrates and synthesizes diverse trends in German and North American psychological research. It will have a very strong impact on how we think about psychological experimentation, and inform us about its historical and philosophical antecedents.

SUSAN DICK, Professor of English, Queen's University, is an outstanding editor of Virginia Woolf's novels and shorter fiction, a major subject in contemporary English studies. Her 1972 edition of George Moore's *Confessions of a Young Man* revealed her skill as an editor, later proved in her editions of Woolf's *To the Lighthouse* (1982) and of Woolf's *Shorter Fiction* (1985). To her reputation as an editor, one must add critical stature, shown in her forthcoming book on Woolf's fiction.

PETER DODWELL, Professor of Psychology, Queen's University, an experimental psychologist, has made significant contributions to the study and understanding of perception. His research has focussed on a fundamental problem of nature: How does the brain construct a stable, coherent, perceptual world out of the unstable, ever-changing, brief glimpses of it? He has combined the rigour of mathematical thinking and the hard facts of the neurophysiology of vision with his own

imaginative psychological and psychophysical experiments into an elegant explanation of the global processes that underlie the perception of the world.

KEITH ELLIS, Professor of Spanish and Portuguese, University of Toronto, endowed with a keen mind, imagination, rigorous scholarly discipline and an infectious enthusiasm for his calling, has won wide recognition for his work on Latin American literature. While thoroughly aware of aesthetic concerns, he never loses sight of the human and social challenges in works of literature. His perceptive structural analysis broadens the bounds of learning; his consistent and diversified commitment to scholarship sheds enriching critical light on significant segments of Latin American letters.

JAMES R. GIBSON, Professor of Geography, York University, is the foremost scholar of the Imperial Russian fur trade in North America, and has written a pioneering work on the introduction of agriculture into the Pacific North West by people of European origin. His research, based on archival investigations in Russian and English sources, presents careful explanatory analyses of settlement and trading processes in frontier areas. He is extending his studies to a comprehensive analysis and synthesis of the international maritime fur trade of the northwest coast of North America.

FRANCES HENRY, Professor of Anthropology, York University, is a contributor to the study of ethnic relations in Canada. Her work on black communities has revealed sensitive theoretical insights and has led to committed involvement in official bodies concerned with race relations, human rights and multiculturalism. Similar work has also been carried out by her in the Caribbean and England, which she recently extended to Jewish issues in Germany. She has also made contributions to the study of religion in the Caribbean.

PETER C.W. HOFFMANN, Professor of History, McGill University, has analyzed the temper, structure and techniques of the domestic opposition to Hitler in a series of magisterial and exhaustive studies, in three languages, ranging from the philosophical and political motivations of the opposition movements to the techniques of conspiracy, and to the countervailing system of personal security surrounding the dictator. The fundamental question posed of the limits of obedience gives these scholarly studies a resonance that far transcends the immediate boundaries of the subject involved.

DOUGLAS N. JACKSON, Professor of Psychology, University of Western Ontario, is an authority in the field of personality assessment. He is President-elect of the Division of Measurement Evaluation and Statistics of the American Psychological Association. His work on test development and test construction has both theoretical and practical importance.

JANE JENSON, Professor of Political Science, Carleton University, was part of a team whose repeated panel studies of class and region in political choice in Canada have been widely published. She has edited and written books and papers on gender and the state, contemporary Canadian politics, and French politics. Most noteworthy have been her book and articles, written with Professor George Ross, on French communism. These studies, based on first-hand experience, have been praised for their originality. They combine theoretical sophistication with keen insight into the lives and roles of the communist party members with whom she worked.

WARREN E. KALBACH, Professor of Sociology, Erindale College, University of Toronto, is a sociologist and demographer who has contributed greatly to our understanding of the population of Canada, with particular reference to the impact of immigration and ethnicity. Author of major works on demographic questions, he has made a significant impact on policy formation and scholarly research in this country.

EVELYN KALLEN, Professor of Anthropology and Social Science, York University, is a social anthropologist who has contributed to studies of ethnic identity, migration and cultural change in such diverse environments as the eastern Arctic, the South Pacific and urban Canada. Her work is highly relevant to social policy formation and exhibits a strong commitment to human rights and the eradication of racism.

PAUL LOVEJOY, Professor of History, York University, established his position as a leading economic and social historian of Africa through books and articles on West Africa, edited volumes, and positions on the editorial boards of major journals. His work on the salt trade, on slavery, and now on the conquest of the Sokoto Caliphate, is marked by knowledge of history, anthropology and economics, massive research, and fine prose.

DONALD MEICHENBAUM, Professor of Psychology, University of Waterloo, is a leading researcher and theoretician in the area of clinical psychology. His major books on cognitive behaviour modification and stress-inoculation training have been translated into several languages

and have had a major impact on both theory and clinical practice. In general terms, Meichenbaum has been influential in reinstating mind into behavioural psychology, with notable benefits to our understanding of people and their problems.

JAN NARVESON, Professor of Philosophy, University of Waterloo, presented in his book *Morality and Utility* (1967) one of the most considerable arguments for utilitarianism offered in a philosophical climate often hostile to that view; subsequently he has become an equally considerable philosophical spokesman for libertarianism. He is a sophisticated philosopher renowned for the vigour of his critical powers.

SHIRLEY NEUMAN, Professor of English, University of Alberta, through her books on the autobiographical writings of W.B. Yeats and Gertrude Stein has not only made major contributions to the work on these authors, but has established herself as an authority on autobiography as a genre. As author and editor of books on and by Robert Kroetsch and Henry Kreisel, she has enlarged appreciation of the literature of western Canada, and by her collection, *A Mazing Space*, has provided an important forum for Canadian women's writing.

STANLEY J. RACHMAN, Professor of Psychology, University of British Columbia, working in the areas of personality, clinical psychology and behavioural medicine, has contributed significantly to the assessment of the effects of psychotherapy, to the understanding of the relation between normal and neurotic cognition and emotion, and to the development of increasingly sophisticated techniques of behavioural therapy. His integrative theoretical and empirical work produced advances both in basic theory and in treatment. He is the director of a major Canadian program in clinical psychology.

WILLIAM R.J. SHEA, Professor of Philosophy, McGill University, established his reputation with his book on *Galileo's Intellectual Revolution*, translated into several languages, which was followed by a series of essays on various aspects of Galileo's activities. Studies on Descartes and his contemporaries as well as on Kant and Hegel, on the history of nuclear physics and on modern science show the wide range of his work. He is one of the few historians of science equally at home in the philosophy of science. He is Secretary-General of the International Union of History and Philosophy of Science.

JANICE GROSS STEIN, Professor of Political Science, University of Toronto, is a member of a new international group of scholars that has broken with the dominant behavioural and realist traditions of International Relations as a discipline in which strategic studies have

tended to be preoccupied with power and the containment of aggression by convincing counterthreats. She has worked instead to develop an approach to decision making on security issues that gives emphasis to nonrational factors, to historical, cultural, religious and socio-economic determinants, and that seeks to promote peace through conciliation, through the reassurance of adversaries, and through compromise.

MARK W. ZACHER, Professor of Political Science, University of British Columbia, has earned his reputation through studies on Canadian oceans policy and his work on international management and collaboration. His co-authored volume on maritime pollution earned the American Society of International Law Award for Preeminent Contributions to Scholarship in 1980, and was similarly recognized through the International Studies Association's Sprout Prize in 1981. His recent volume on the management of international commodity trade has received the Columbia University Press Rickerd Prize.

SPECIALLY ELECTED FELLOW

GEORGE IGNATIEFF, Honorary President, Science for Peace, a descendant of a distinguished Russian family, came to Canada in 1928 destined for a career of leadership and service. Ambassador to N.A.T.O. and to the U.N., Assistant Under-Secretary of State for External Affairs during the Diefenbaker years, diplomatic advisor to the U.N. Atomic Energy Commission, President of the U.N. Security Council and Ambassador to the Disarmament Committee, his role as peace-maker and advocate of reason and caution remains exceptional. Author, College Provost, Chancellor, and now Honorary President of Science for Peace, his convictions and talents are salutary to this nation.

ACADEMY/ACADÉMIE III

NICHOLAS R. ANTHONISEN, Professor of Medicine, University of Manitoba, has demonstrated consistent scientific achievement in the area of respiratory physiology, pathophysiology and the management of lung disease. He has made major contributions to the understanding of regional lung function in health and disease and the control of breathing in health and disease. He has also produced unique and important advances in the treatment of chronic lung disease.

ALAN ASTBURY, Department of Physics and Astronomy, University of Victoria, is recognized worldwide as a leader in elementary particle physics, having been an active participant in the important experimental discoveries in this field at the major research centres in the world. Recently he was co-leader of an experiment of the CERN laboratory

which discovered the W and Z particles, the most important particle physics experiment in decades. In 1983 he was appointed R.M. Pearce Professor of Physics at the University of Victoria. He is playing an important role in the development of particle physics in Canada, and is today the most widely recognized Canadian experimental particle physicist.

DOUGLAS ATACK, Vice-President and Director of Research, PAPRICAN, is the acknowledged world leader in the science of mechanical pulping, an area of vital importance to one of Canada's foremost industries. His contributions towards the theory of grinding and refining of wood pulp are unmatched by anyone else in the field. Early in his career he discovered the mechanisms involved in the production of stone ground-wood. He then went on to elucidate the principles of chip refining in double disc refiners. Through his work, he has played a major role in the introduction of chip refining, thermomechanical pulping and chemithermomechanical pulping into the Canadian newsprint industry.

JOYCE BEARE-ROGERS, Chief, Nutrition Research Division, Health and Welfare Canada, has spent her research career in the field of nutritional biochemistry, where her contributions have been largely in the application of lipid biochemistry to nutritional problems of fats and oils. In particular, her studies of physiological changes, particularly cardiac lipid changes, in animals fed rapeseed oil containing erucic acid pointed to the need for the development of "zero erucic acid" rapeseed (Canola seed) which became a major oilseed crop in Canada. For her research in this area, Dr. Beare-Rogers has won many Canadian and international awards and has been appointed to international Committees on the Nutrition of Fats and Oils. She has also contributed greatly to university teaching and laboratory training of students in nutritional biochemistry.

WILLIAM BRIDGER, Department of Biochemistry, Faculty of Medicine, University of Alberta, has a fine international reputation for his work on enzymes which contain two types of subunits and whose reaction mechanism encompasses the intermediary participation of a covalently-bound phosphate. In particular, his research with succinyl-CoA synthetase led to enunciation of the principles of substrate synergism to account for the overall reaction being faster than the partial reactions, and of catalytic cooperativity to explain the alternating sites phenomenon. These examples attest to his ability to grasp the essential elements from a mass of data and express a unifying principle of wide applicability. He has also demonstrated mutual recognition and interdependence between the A and Ã subunits of the synthetase during refolding, and made an instructive contribution to this area of protein

structure studies. He is now studying the regulatory and genetic aspects of the import of the enzyme into the mitochondria. He has also served the scientific community well, including being secretary and president of the Canadian Biochemical Society, and he received its Ayerst Award in 1980 in recognition of his excellent research.

A.J. CARTY, Department of Chemistry, University of Waterloo, has accomplished a large body of work on coordination compounds of the group III elements and made seminal contributions to the complexation of toxic mercurials at biological sites. He has pioneered the use of phosphinoalkynes as versatile ligands and is an internationally recognized authority on phosphide and acetylide polynuclear chemistry. His articles in these fields were among the 100 most cited papers in pure chemistry in 1981-84. Recently he has been a principal contributor to our understanding of structure-reactivity patterns in metal cluster chemistry. In addition, he has played a major role in Canadian chemistry as chairperson and group chairperson of NSERC peer review committees.

GARRY CLARKE, Department of Geophysics and Astronomy, University of British Columbia, a geophysicist with a deep respect for thermodynamics, has become an international authority on thermal regimes of glaciers, and the effect of temperature on glacier flow, including the phenomenon of glacier surging in catastrophic response to environmental change. He is unquestionably Canada's leading scientist in these fields. Thoroughly adept at mathematical modelling and in the theoretical aspects of glaciology, he is equally at home in instrumentation (to which he has made highly innovative contributions) and in field work on the ice itself. He is an effective communicator with scientists in neighbouring disciplines, able to grasp their problems and apply his expertise to solutions. In all his work he displays remarkable physical intuition combined with meticulous scholarship of a very high order.

JACQUES COURVILLE, Département d'anatomie, Université de Montréal, a reçu sa formation en médecine et en neuroanatomie. Il a voué sa carrière à l'étude du cervelet des mammifères. Utilisant diverses techniques expérimentales, il a approfondi la structure et les connexions afférentes et efférentes de cet organe. Ses recherches se caractérisent par une grande attention aux détails. Dans ses écrits scientifiques, il met en relief l'importance physiologique de ses observations anatomiques. Son oeuvre, respectée à travers le monde, a contribué à démythifier la fonction d'une partie essentielle du système nerveux central.

MIKLOS CSORGO, Department of Mathematics and Statistics, Carleton University, has made outstanding contributions of fundamental importance to probability theory and mathematical statistics, and in

particular has played a major role in the development of strong approximation methods and invariance principles. Over the past several years he has applied these techniques to weighted quantile and empirical processes, empirical reliability and concentration processes, and has obtained deep results on the increment structure and local time of random walks and the Wiener process. He has published three books and over 100 papers, and has been awarded a Killam Senior Research Scholarship.

SAM DALES, Department of Microbiology and Immunology, University of Western Ontario, is an outstanding scientist in whose laboratory many excellent researchers have trained. His early research on Poxviruses established his reputation and culminated in a 1981 monograph, *Biology of Poxviruses*. His recent focus has been on virus-related demyelinating disease, an important area in which his impact can be seen in the number (6) of invited reviews he contributed in 1987-88. A major discovery was the demonstration that infection leading to demyelination is host-age dependent and related to the differentiation process of the target oligodendrocyte cell. He is a world authority on virus-cell interactions; his papers were cited over 80 times in 1987 according to SCI's Citation Index.

WAYNE F.J. EVANS, Chief, Experimental Studies Division, Atmospheric Environment Service, is Canada's pre-eminent authority on global ozone, and his pioneering work on its photochemistry has earned world-wide recognition. He made the first rocket measurements of the altitude distribution of molecular oxygen singlet delta emission, and of water vapour at high altitude. He recently participated in space shuttle measurements of ozone. His contemporary contributions include the very first measurements of Earth's actual greenhouse radiation, and the first measurements on the possible extent of the previously unrecognized Arctic ozone hole. Dr. Evans's leadership in the scientific community is widely recognized by his colleagues and the popular press.

W.F. GRANT, Department of Plant Science, Macdonald College of McGill University, is the world authority on the genetics and biosystematics of *Lotus corniculatus* and has made many outstanding contributions of international recognition to plant biosystematics and cytogenetics. He has carried out pioneering studies on the use of higher plant species for testing and monitoring for mutagenic effects of environmental pollutants. He has received major national and international honours, has been a sought-after speaker around the world (including a Nobel Symposium in Sweden), has been a consultant to and chairperson of many organizations and professional societies, and has

been on the editorial board and editor of several journals such as the *Canadian Journal of Genetics and Cytology* (now *Genome*).

MALCOLM HARVEY, Senior Scientific Officer, Physics and Health Science, Chalk River Nuclear Laboratories, is recognized for the high quality of his research in nuclear and particle physics and for his leadership in the promotion of science in Canada. Dr. Harvey is distinguished for his early studies on the complementarity between the nuclear shell model and collective models; for his seminal work on the interpretation of the repulsion between nucleons in terms of constituent quark structures; and for his recent innovative work on the use of solitons for particle structures. He has contributed much to the strength of Canadian Science through his leading role in the organisation of meetings and through his exciting and stimulating lectures to his peers and to the general public.

ROY DAVID HYNDMAN, Director, Pacific Geoscience Centre, Energy, Mines and Resources Canada, is undoubtedly one of the most versatile and productive marine geophysicists in Canada. His downhole and laboratory measurements of the physical properties of oceanic crustal rocks, imaginatively and powerfully integrated with gravity, electromagnetic and geothermic studies, have won him international recognition. He has applied an exceptionally broad range of expert knowledge to the solution of important problems related to the origin and evolution of oceanic lithosphere and continental margins off eastern and western Canada. His papers are not only rich sources of accurate observations and accounts of novel instrumentation; they put forward ideas of great originality on the nature of the oceanic crust and its role in plate tectonics. The maturity and verve of his scientific leadership are admired by all with whom he so willingly explores new concepts in marine geophysics and geology.

NOEL JAMES, Department of Geological Sciences, Queen's University, has made imaginative, exceptionally thorough and extensive contributions to the fields of carbonate sedimentology, stratigraphy and paleontology. In carbonate sedimentology he has developed comprehensive models for the evolution of reef ecosystems through geological time. He has combined detailed field and laboratory work in sedimentology, stratigraphy and paleontology to explain the development of passive continental margins and bordering carbonate platforms in the Appalachians, Oman, Egypt and Australia. His many reviews of facies models have become basic references. The quality of his research has been attested to by many awards, including the Past President's Medal of the Geological Association of Canada, the Distinguished Lectureship of the American Association of Petroleum Geologists, and a Steacie

Fellowship from the Natural Sciences and Engineering Research Council.

JACQUES JOLICOEUR, Directeur du laboratoire de biologie moléculaire de l'Institut de recherches cliniques de Montréal (IRCM), scientifique éminent, se distingue dans le domaine des rétrovirus et du cancer. Ses travaux les plus remarqués portent sur le contrôle moléculaire du gène Fv-1, sur l'identification de plusieurs déterminants du pouvoir pathogène des rétrovirus responsables de la leucémie murine et sur l'isolation de cellules révertantes qui représentent un outil extraordinaire pour l'étude de l'intéraction des gènes cellulaires et de l'oncoprotéine V-Fos. L'un des rétrovirus étudiés provoque une paralysie et de lésions neurologiques semblables à celles que produit le virus du SIDA. Le docteur Jolicoeur a identifié et cloné un rétrovirus défectif à l'origine du syndrome d'immunodéficience acquise murin (MAIDS).

GERALDINE KENNEY-WALLACE, Department of Chemistry, University of Toronto, is widely recognized for her important contributions to our knowledge concerning very fast molecular relaxation and interactions. She is an acknowledged authority on the application of laser spectroscopic techniques in physical chemistry. Early studies using nano- and picosecond lasers led to the measurement of the life-times of solvated electrons, the confirmation of two-photon photoionization of arenes in polar liquids, and the clarification of the structures of molecular solvation clusters. More recent researches using subpicosecond non-linear optical spectroscopy in the femtosecond range elucidated the nature of ultra-fast molecular dynamic processes in liquids including the direct observation of the temporal evolution of intramolecular vibrations. In addition, her significant involvement in science policy matters has recently been acknowledged by her appointment as President of the Science Council of Canada.

DOREEN KIMURA, Department of Psychology, University of Western Ontario, is an international leader in human neuropsychology. Her early work at the Montreal Neurological Institute shed new light on the perceptual and memory functions of the temporal lobes. She was the first to use the Broadbent dichotic-listening technique to demonstrate a dual functional asymmetry in the auditory system and its relations to cerebral dominance for speech. At the University of Western Ontario, in a set of ingenious experiments, she established a close link between the programming of the oral movements of speech and that of nonverbal oral and manual movements. Her present research focusses on individual differences in cerebral organization, including hormonal influences.

WILLIAM LEGGETT, Dean of Science, McGill University, has made important contributions in the field of the relation between the physical environment and the life and behaviour of fish, both marine and freshwater, in particular fish migration, population dynamics and production. He pioneered the emphasis on abiotic variables as first-rank determinants of annual variations in production, a considerable advance on the biotic models formerly used in prediction. His work has married the disciplines of meteorology, physical oceanography and biology, thus opening new fields of understanding and prediction.

CLAUDE LEROY, Département de physique, Université McGill, joue un rôle déterminant dans la formation et le développement de jeunes physiciens au Québec et au Canada en général. Il a pris part à d'importantes expériences ayant trait à la physique nucléaire et à la physique des particules à faible, moyenne et haute énergie. Il a contribué de façon majeure à l'Interaction Electro-Faible (incluant les courants de seconde classe, la conservation des nombres électronique et muonique), aux Interactions Fortes (incluant la production de saveurs lourdes, la diffraction et la recherche du plasma de Quarks et de Gluons) et la Calorimétrie (il a construit le premier calorimètre utilisant le silicium comme milieu actif). Il dirige le groupe d'expérimentateurs de l'expérience HELIOS au CERN responsable pour l'opération et l'analyse de physique des données des calorimètres. Il est un parmi un groupe de trois dirigeant cette expérience, qui implique vingt-deux instituts venant du monde entier et environ cent quarante physiciens en tout.

LARRY MILLIGAN, Dean of Research, University of Guelph, has made extensive contributions to the understanding of the metabolic physiology of ruminant animals, particularly cattle and sheep. His research has helped elucidate pathways of digestion and synthesis of compounds in the rumen (one of the four chambers in the stomach of cattle). Of major importance is his clarification of how rumen microbes utilize ammonia for protein synthesis, and the physiological controls for the recycling of blood urea to the rumen for subsequent conversion to ammonia and use by the microbes. Using his basic research as the foundation, Dr. Milligan has been a leader in developing practical techniques for development and evaluation of feedstuffs for ruminants.

BEVERLEY PEARSON MURPHY, Faculty of Medicine, McGill University, pioneered the protein-binding assays for hormones, and is known around the world for her contributions in steroid chemistry and biochemistry. Two of her scientific publications are among the hundred articles of clinical research most cited internationally, and one was the most cited between 1961 and 1978 from any Canadian institution. Her impact on biochemistry has been such as to change the approaches in

most steroid laboratories. More recently, she has influenced the development of fetal endocrinology for which she is also well recognized.

EDWARD PIERS, Department of Chemistry, University of British Columbia, has made notable contributions to the field of synthetic organic chemistry, both with respect to the synthesis of naturally occurring compounds and to the development of new synthetic methods. His research group has completed an impressive number of total syntheses, including the first preparations of aristolene, copaborneol, seychellene, and ishwarone. These syntheses have become classic examples of the elegant use of logic in the synthesis of natural products, particularly with regard to control of stereochemistry. He has also added a number of extremely useful general synthetic methods to the organic chemist's armoury.

DAVID M. REGAN, Department of Psychology, York University and Department of Ophthalmology, University of Toronto, has explored the ways in which sensory information is processed using the electrical activity evoked in the brain as a guide. He has developed novel and brilliant techniques to explore new and fundamental concepts and to apply his findings as procedures in ophthalmology and aerospace medicine.

JAMES C. RITCHIE, Division of Life Sciences, Scarborough College, University of Toronto, is a Late Quaternary researcher, especially known for his imaginative and meticulous reconstructions of vegetational and climatic history of northern Canada, particularly of northern Yukon, N.W.T., Saskatchewan, Alberta and Manitoba. A student of tree line fluctuations in the arctic, and of the little Ice Age, since 1978 he has also researched Late-Quaternary reconstructions of Late-Pleistocene and Holocene vegetation and palaeoclimates of Mediterranean and North Africa, cultural and prehistorical subsistence patterns and desertifications, etc. He has published 83 papers and 4 books.

BETTY IDA ROOTS, Department of Zoology, University of Toronto, is a pioneer in the study of adaptations of the nervous system to environmental changes, and a pioneer in techniques to isolate and characterize individual nerve cells. She has monitored and described bio-chemical and ultrastructural changes in neurons of animals adapted to different temperatures, nutritional regimes, and oxygen tensions, emphasizing the importance of membrane lipids in the maintenance of membrane fluidity and permeability. Interactions between neurons and glial cells were explored by Professor Roots and her co-workers. She helped establish biological science at Erindale College, University of Toronto.

DOUGALS M. RUTHVEN, Departemt of Chemical Engineering, University of New Brunswick, is an international authority on adsorption processes. Building on earlier contributions to catalytic processes and catalyst properties, his investigations have extended the scientific and technical base for the use of zeolites in hydrocarbon separations, for the separation of argon from oxygen, for the removal of radioactive krypton from nuclear off-gases, and for the important new field of pressure swing adsorption. He has authored over 100 scientific papers, scores of technical reports for industry, current encyclopaedia articles, and an acclaimed monograph on adsorption processes.

CAMERON STEWART, Department of Pure Mathematics, University of Waterloo, has done imaginative work in analytic number theory that has produced many original and striking results. His early work on applications of transcendence theory to divisors of arithmetical sequences initiated a new field of study. His results in that area have never been surpassed. His introduction of transcendence theory into the study of heights of algebraic numbers led to the subsequent important generalization of these results to elliptic curves and abelian varieties. His recent work has combined methods from analytic and combinatorial number theory to solve a number of well known difficult problems.

HIROOMI UMEZAWA, Department of Physics, University of Alberta, with more than 200 papers and 4 books to his credit, is internationally recognized as one of the foremost pioneers in the postwar development of relativistic quantum field theory. His fundamental contributions include many powerful and general results in renormalization theory, including the derivation of general criteria for the renormalizability of an arbitrary interaction. Since coming to Canada in 1975, he has with collaborators revolutionized the application of quantum field theory to statistical mechanics and solid-state physics through his formulation of Thermofield Dynamics and his concept of dynamical rearrangement of spontaneously broken symmetries.

RICHARD A. VOLLENWEIDER, Senior Scientist, National Water Research Institute, Canada Centre for Inland Waters, has played a major role in the science of limnology in both Europe and North America. His models relating the abundance of phytoplankton in lakes to inputs of phosphorus and rates of water renewal are used as the basis for managing eutrophication in the majority of the world's lakes, including the St. Lawrence Great Lakes. In 1986, he received the prestigious international Tyler Prize for this work. In earlier papers which are now classics, Vollenweider quantified the optical properties of lakes, and made several pioneering investigations in the relationship between the light attenuation in lakes and algal photosynthesis.

SPECIALLY ELECTED FELLOW

JOHN EVANS, Chairman and Chief Executive Officer, The Allelix Inc., is recognized for a long and illustrious career in academic medicine in Canada, and internationally. As its first dean, Dr. Evans was personally responsible for the development of a highly innovative medical school at McMaster University. He was instrumental in identifying the importance of epidemiology and biostatistics in that school and elsewhere in Canada. In addition to these initiatives, Dr. Evans has played a central role in academia in Canada and has acted as advisor to numerous bodies throughout the world, including the World Bank.

OTHER MEETINGS/AUTRES RÉUNIONS

Society and Academy Committees met at business meetings from 3 to 7 June.

A general symposium on "Progress" was held on Tuesday, 6 June. The Academies held symposia and heard separate papers. The program of conferences appears as an appendix: Order of Proceedings for the Annual Meeting. Selected papers will appear in the *Transactions*.

On Tuesday evening, Fellows and guests attended a reception in Quebec City Hall which was followed by the annual dinner. The President of the Royal Society of Canada presented to the laureates the Awards of the Society for 1989.

ANNUAL BUSINESS MEETING/ ASSEMBLÉE GÉNÉRALE ORDINAIRE

The Annual Business Meeting was held in Auditorium 1C of De Koninck Hall of Université Laval at 15:00 on Tuesday, 6 June, 1989. Fifty-eight Fellows were present.

The President, Digby J. McLaren, welcomed the members and called this 107th meeting to order.

MOTION *by M. G. Bélanger, seconded by Dr. A.G. McKay that the minutes of the 1988 Annual Business Meeting be approved as presented in the Proceedings, Fifth Series, Volume III, 1988.* **CARRIED**

The minutes of the last meeting have been reviewed by the Executive and Council and all business arising would be dealt with within the agenda.

REPORT FROM THE PRESIDENT/RAPPORT DU PRÉSIDENT

The President reported on the most recent developments within the Society:

a) In a Press Release dated 30 May, 1989, the Hon. William Winegard announced that the Society will receive $1,000,000 a year in funding for the next five years.

b) The Prime Minister's office has announced that the Society will be advising on the publication of a new bilingual environmental journal.

c) The Development Plan of the Society has been distributed to all Fellows. Comments in writing can be received to the end of June. The final version of the plans will be published in three separate bilingual booklets (one for each plan) and should be available later in the year.

d) Council of the Society has received a report from the Editorial Review Committee chaired by Prof. F. Halpenny. The report will be discussed by Executive and Council at their next meeting.

e) Some reorganization is taking place within the Academies. Full reports will be presented by the Presidents of Academies.

f) The fellowship is encouraged to continue, and increase, its efforts as outlined in the Development Plan. Contributions of the membership were important in getting funding for the Society. Now that the Society is recognized as Canada's National Academy, it must rise to the challenge to meet higher expectations.

g) Special thanks conveyed to the Executive Director and staff of the Society who have had to deal with an excessively large volume of work in inadequate quarters.

<u>Adoption of Development Plan</u>

The advantage of printing the three plans separately rather than in a single volume was questioned.

It was pointed out that the plans dealt with three very different subjects aimed at different audiences. The Corporate Plan will be useful for fundraising purposes and will be updated annually whereas the other two

plans could have significant separate sales and need not be reviewed so often.

It was emphasized that the Corporate Plan should be given priority and that an Executive Summary should be included in each plan. The design of the final publication should be handled professionally.

A suggestion to publish one edition of the whole document for Fellows and a second, three-part edition for other purposes was rejected on the basis of cost.

MOTION *by Dr. Vijh and seconded br Dr. Barnes that the Development Plan of the Society consisting of the Corporate Plan, the Plan for Advancement of Women in Scholarship and the Plan for the Evaluation of Research in Canada be approved, in principle.* **CARRIED**

MOTION *by M. Paquet and seconded by Dr. Brown that the President's report be accepted.* **CARRIED**

Prof. J.M. Robson expressed congratulations to all those involved in the preparation of the Development Plan - an excellent document. Acclaimed.

REPORTS/RAPPORTS

Representatives of each Academy presented brief reports of their academies.

Académie I : La Secrétaire de l'Académie des lettres et des sciences humaines, Mme Jeanne Demers, rapporte que l'assemblée générale de l'Académie a eu lieu le mardi, 6 juin 1989 à midi. Environ 25 personnes y ont assisté. L'assemblée a pris connaissance du rapport du Président, M. Naïm Kattan et a discuté les plans de développement de la Société et de l'Académie. Pour l'année 1989-90, le Conseil de l'Académie sera composé de son bureau : M. Gilles Paquet, président; M. Clément Moisan, vice-président; Mme Jeanne Demers, secrétaire; M. Naïm Kattan, ancien président ainsi que de MM J.D. Gendron, François Duchesneau, Louis Sabourin, Maurice Lebel, Pierre Camu, et Guy Sylvestre. Tous les mandats sont d'une durée de trois ans. Le rapport complet de l'Académie I paraît aux pages 39-41.

PROPOSITION *M. Bélanger, appuyé par M. Camu, propose l'adoption du rapport.* **ADOPTÉE**

Academy II: The President, Prof. Jean Laponce, reported that the business meeting of the Academy of Humanities and Social Sciences was held on Tuesday, 6 June. Officers were elected to fill vacancies on various committees within the Academy and the Society. A complete list of all officers will be submitted to the secretariat.

A reorganization plan for the Academy was approved. The New Fellows Committee will henceforth be combined with the Council of the Academy. Several projects will be developed during the forthcoming year. A complete report appears on pages 42-45.

MOTION *by Dr. Brown, seconded by M. Paquet, that the report of Academy II be accepted.* **CARRIED**

Academy III: The President, Dr. E.A. McCulloch, reported that the Academy of Science held its annual business meeting on Monday, 5 June at which time new officers were elected. The new Vice-President of Academy III is Dr. R.C. Barnes.

Academy III has had four Council meetings over the past year. The report of the Committee on the reorganization of the Academy of Science (CORAS) was debated in Council and at the Annual Business Meeting. The principle aspects of the CORAS report dealt with the reorganization of the Academy into four divisions; changes in the nomination process to allow one nominator to be a non-Fellow; solicitation of 3 letters of reference for each nomination; changes in the election process within the Academy; and changes in the number of officers. A complete report appears on pages 45-48.

The new bilingual Journal on Environment was also discussed at length. Although Academy III had originally had reservations about this endeavour, it is now satisfied that the procedure outlined by the Hon. Jules Deschênes will ensure proper consultation.

MOTION *by Dr. Scott, seconded by Dr. Lorch, that the report of Academy III be accepted.* **CARRIED**

THE REPORT OF COUNCIL/LE RAPPORT DU CONSEIL

The Honorary Treasurer briefly explained items in the financial statement within the Report of Council and provided a correction to the last page: Balance for the Development Fund at 28 February, 1989 was $186,019.00

The Honorary Treasurer emphasized the importance of the Development Fund. He invited Fellows to continue their donations which will assist us in raising money from the provinces and from industry.

MOTION *by M. Sylvestre, seconded by Dr. McKay, that the Business Meeting approve the 1988-89 Report of Council.* **CARRIED**

AMENDMENTS TO THE BY-LAWS/
MODIFICATIONS AUX STATUTS

The Honorary Secretary suggested that each amendment be considered individually and voted upon separately.

By-Law 9.3.: Given that the Presidency of the Royal Society of Canada alternates between a member of Academies I or II and Academy III, the following proposition is to assure a continuity in the Council of the Society.

MOTION *by M. Légaré, seconded by Dr. McRae, that article 9.3.4 be added to the By-Laws: The President-elect shall be a voting member of the Executive and Council of the Society from the time of his/her election. The immediate Past-President shall be a voting member of the Executive and Council of the Society during the two years following his/her retirement from office*. **CARRIED**.

Statuts 9.3. : Etant donné que la Présidence de la Société royale du Canada alterne entre un membre des Académies I ou II et un membre de l'Académie III, la proposition suivante vise à assurer une continuité au Conseil de la Société.

PROPOSITION *M. Légaré, appuyé par Dr. McRae, propose que le paragraphe 9.3.4 soit ajouté aux Statuts : Dès son élection, le Président-élu est membre votant du Comité Exécutif et du Conseil de la Société. Le Président-sortant, pendant les deux années qui suivent l'expiration de son mandat de président, est membre votant du Comité Exécutif et du Conseil de la Société*. **ADOPTÉE**

By-Law 11.1: Given the adoption of the previous amendment, article 11.1 should be modified.

MOTION *by M. Légaré, seconded by Dr. Krótki, that article 11.1 of the By-Laws be modified as follows: There shall be a Council of the Society which shall consist of ... the immediate Past-President for the two years following his/her retirement from the office of President, ...* **CARRIED**

Statuts 11.1 : L'article 11.1 des Statuts de la Société doit être modifié en vertu de la proposition adoptée à l'instant.

PROPOSITION *M. Légaré, appuyé par Dr. Krótki, propose que l'article 11.1 des Statuts soit modifié comme suit : Le Conseil de la Société se compose des membres du .... du Président-sortant pendant les deux années qui suivent l'expiration de son mandat de Président...* **ADOPTÉE**

By-Law 12.3: The Fellowship Committee of the Society recommends that article 12.3.1.2 of the By-Laws of the Royal Society of Canada, adopted in 1987, be prolonged for the next two years.

MOTION *by M. Légaré, seconded by Dr. McKay, that article 12.3.1 of the By-Laws be modified by adding the following paragraph:*

12.3.1.3 For the period from July 1, 1989 to June 30, 1991 additional new Fellows may be added according to the following schedule:
Academy II, not more than five in each year.
Academy III, not more than five in each year. **CARRIED**

Statuts 12.3: Le Comité des candidatures de la Société recommande que l'article 12.3.1.2 des Statuts de la Société royale du Canada, adoptée en 1987, soit prolongée pour les deux prochaines années.

PROPOSITION *M. Légaré, appuyé par Dr. McKay, propose que l'article 12.3.1 des Statuts soit modifié en ajoutant le paragraph suivant :*

12.3.1.3 Du 1er juillet 1989 au 30 juin 1991, des candidatures supplémentaires peuvent être acceptées comme suit :
Academy II, pas plus de cinq membres supplémentaires par année.
Académie III, pas plus de cinq membres supplémentaires par année. **ADOPTÉE**

By-Law 18: In certain circumstances it would be preferrable if the Society could be permitted to conduct a vote on questions of great importance by mail.

MOTION *by M. Légaré, seconded by Dr. Brown, that article 18.1 of the By-Laws of the Society be amended as follows: The By-Laws may be amended*

at a Business Meeting of the Society by a vote of two-thirds of all the Fellows present and voting or by a majority vote of the members of each Academy present and voting.

The By-Laws may also be amended by mail by a majority vote of participating members from each Academy. **CARRIED**

Statuts 18 : Dans certaines circonstances, il peut être souhaitable que la Société ait recours à un vote par courrier pour traiter de questions importantes.

PROPOSITION *M. Légaré, appuyé par Dr. Brown, propose que l'article 18.1 des Statuts de la Société soit modifié comme suit : Les Statuts peuvent être amendés à une assemblée générale ordinaire de la Société par un vote des deux tiers des membres présents et qui prennent part au scrutin ou par un vote majoritaire des membres de chaque académie qui sont présents et prennent part au scrutin.*

Les Statuts peuvent aussi être amendés par scrutin postal par un vote majoritaire des membres de chaque académie qui y prennent part. **ADOPTÉE**

MOTION *by M. Légaré, seconded by Dr. A.B. Underhill, that article 18.2 of the By-Laws of the Society be modified as follows: Notice of motions to amend the By-Laws shall be given to the Honorary Secretary at least two months before an Annual or Special Business Meeting of the Society, and the Honorary Secretary shall submit the text of such motions to the Fellows at least one month before the meeting.*

In the case of a mail ballot, there will be a one-month interval between the mailing of the proposed amendment and the counting of the ballots.

It was suggested that a period of six weeks would be more appropriate to ensure that all members had received the documentation. **CARRIED**

PROPOSITION *M. Légaré, appuyé par Dr. A.B. Underhill, propose que l'article 18.2 des Statuts de la Société soit modifié comme suit :*
Un préavis de deux mois adressé au Secrétaire est nécessaire pour que les Statuts puissent être amendés à une assemblée générale ordinaire ou extraordinaire de la Société. Le Secrétaire doit alors soumettre aux membres le texte des propositions d'amendement au moins un mois avant la réunion qui doit en discuter.

Dans le cas d'un scrutin postal il y aura un interval d'un mois entre la date de l'envoi des changements proposés et le dépouillement du scrutin.

On suggère qu'une période de six semaines serait plus appropriée pour assurer que tous les membres reçoivent la documentation. **ADOPTÉE**

It was pointed out that some items in the By-Laws needed clarification (i.e. who has the authority to convene a Special Business Meeting), and that a review of the By-Laws should be undertaken in the near future.

NEW OFFICERS/NOUVEAUX MEMBRES DU BUREAU

Following a recommendation from the Committee for Nomination of Officials, which is comprised of Members of the Executive, the past Honorary Secretary and the past Honorary Treasurer, the Council of the Society has approved two proposed nominations.

MOTION *by M. Légaré, seconded by Prof. Laponce, that the Honorable Juge Jules Deschênes be named President-elect for the year 1989-90. M. Deschênes would become President of the Society in June 1990 for a period of three years.* **CARRIED**

MOTION *by M. Légaré, seconded by M. Sylvestre, that M. Pierre Camu be named Honorary Secretary of the Society effective June 1989 for a period of three years.* **CARRIED**

Suite à une recommandation du Comité des candidatures des administrateurs, formé des membres de l'Exécutif plus l'ancien Secrétaire et l'ancien Trésorier, le Conseil de la Société a soutenu les deux nominations proposées.

PROPOSITION *M. Légaré, appuyé par M. Laponce, propose que l'Honorable Juge Jules Deschênes soit nommé Président-élu pour l'année 1989-90. M. Deschênes deviendra Président de la Société en juin 1990 pour un mandat de trois ans.* **ADOPTÉE**

PROPOSITION *M. Légaré, appuyé par M. Sylvestre, propose que M. Pierre Camu soit élu Secrétaire de la Société royale du Canada effectif en juin 1989 pour un mandat de trois ans.* **ADOPTÉE**

MOTION BY I. HALPERIN/PROPOSITION PAR I. HALPERIN

Prof. I. Halperin had notified the Secretary of his intention to present a motion asking the Society to support a campaign to end all torture in Chile.

Since Prof. Halperin was not present at the meeting, it was felt that the motion could not be voted upon.

MOTION by Dr. A.G. McKay, seconded by Dr. A.B. Underhill, that Professor Halperin's motion be tabled. **CARRIED**

APPOINTMENT OF AUDITORS FOR 1989-90/DESIGNATION DES VERIFICATEURS POUR 1989-90

MOTION *by Dr. Ramsay, seconded by Mr. Légaré, that the firm McCay, Duff and Co. be retained as auditors for 1989-90.* **CARRIED**

VOTE OF THANKS/VOTES DE REMERCIEMENTS

President McLaren expressed his gratitude to retiring members of the Executive, M. Jacques Légaré as Honorary Secretary, Dr. A.G. McKay as Past-President, and M. Naïm Kattan as Président de l'Académie des lettres et des sciences humaines, as well as to outgoing members of Council. The President also acknowledged the work of M. Paquet for the organization of the successful and exciting program at Université Laval.

NEXT ANNUAL MEETING/PROCHAIN ASSEMBLÉE ANNUELLE

The next Annual Meeting will be held on 3 to 7 June, 1990, at the University of Victoria, Victoria, B.C.

The site of the 1992 Annual General Meeting was discussed briefly as was continued participation in the Learned Societies Conference. It was pointed out that high registration fees and conflict with meetings of other scientific societies contributed to modest attendance.

The matter will be considered further and a report made at the next Council meeting.

OTHER BUSINESS/AUTRES POINTS

The President-elect thanked his colleagues in the Royal Society of Canada for their vote of confidence.

Le Président-élu remercie ses collègues de la Société royale du Canada pour le vote de confiance qu'ils viennent de lui faire.

The honour of being named President-elect is a heavily loaded gift because the Society is more alive and on the verge of taking over additional responsibilities. Its success can only be achieved by the support of the Fellowship. The extraordinary leadership of Dr. Digby McLaren over the past two years is an initiative worth following, and I accept the position with humility and a promise of devotion.

Dr. A. Vijh asked if the Society has given thought to the concern raised in other National Academies about plagiarism and fraudulent activities in science. He agreed to consult with other members in this respect and if warranted to make a formal proposal for further consideration.

ANNOUNCEMENTS/ANNONCES

Fellows are invited to visit the exhibition of paintings by Prof. Smirnoff, F.R.S.C., in the Bonenfant Bldg.

The Society is co-sponsoring a symposium entitled "Facing the Demographic Future" which will take place immediately after the Society's Annual General Meeting, on 7-9 June. Fellows who are interested may register at the Society's office on campus.

ADJOURNMENT/LEVÉE DE L'ASSEMBLÉE

MOTION *by Dr. Brown, seconded by M. Dion, that the Annual Business Meeting be adjourned at 16:45.* **CARRIED**

Presentation of Awards
Présentation des distinctions

CHAUVEAU MEDAL

John M. Robson, F.R.S.C.

Professor Robson is the Textual and General Editor of the thirty-three volume *Collected Works of John Stuart Mill*, an edition internationally welcomed as a critical and editorial model for other large and complex projects. A whole new interpretation of the thought of Mill has resulted from his monumental edition, which was initiated in the late 1950s.

The eminence of the Mill project has led to Professor Robson being asked to advise on and guide other large editorial projects, among them the Disraeli letters, the editions of Jeremy Bentham, Bertrand Russell, and A.M. Klein, and the Centre for Editing Early Canadian Texts. For thirty years Professor Robson has been a productive and recognized scholar in nineteenth-century British letters and thought, with writings on Mill and Bentham, and also on Charles Dickens, George Eliot, editing, rhetoric, and social history.

Born in Toronto, he received his B.A., M.A., and Ph.D. from the University of Toronto. He is active in numerous scholarly offices and has a lengthy publication record. He was appointed University Professor at the University of Toronto in 1986.

THE SIR WILLIAM DAWSON AWARD

Henry G. Thode, F.R.S.C.

Dr. Thode, considered one of Canada's most distinguished physical scientists, is best known for his seminal experiments in stable isotope research and nuclear fission. His explorations on the distribution of the sulphur isotopes have contributed to the fields of chemistry, geology, physics, biochemistry, cosmochemistry and environmental science.

From 1961 to 1972, as President and Vice-Chancellor of McMaster University in Hamilton, Ontario, he was concerned with the administration of the university -- seeking financial resources, planning and developing buildings, and appointing staff. During this period, Dr.

Thode resolutely kept his laboratory functioning, turning out world-class research even with the administrative demands made on his time.

Dr. Thode was born in Dundurn, Saskatchewan, in 1910. He earned his B.Sc. (1930) and M.Sc. (1932) at the University of Saskatchewan, and his Ph.D. (1934) at the University of Chicago. He joined the Department of Chemistry at McMaster University in 1939 where he is currently Professor Emeritus. Dr. Thode has a lengthy record of scholarly and professional activities, including fifteen years (1966-81) as a Director and member of the Executive Committee, Atomic Energy of Canada Ltd. He has received eleven honorary degrees and has published more than 150 papers. Dr. Thode was President of the Royal Society of Canada during 1959-60 and was made a Companion of the Order of Canada in 1967.

THE THOMAS W. EADIE MEDAL

Ashok K. Vijh, F.R.S.C.

Dr. Vijh passe pour l'un des meilleurs électrochimistes de notre temps. L'électrochimie connaît actuellement un renouveau, aussi bien sur le plan théorique que sur le plan des applications industrielles, et Dr. Vijh en est considéré comme l'un des principaux artisans.

La contribution de Dr. Vijh à l'électrochimie, au travers d'études de longue haleine et d'applications industrielles dérivées de celles-ci, est énorme et couvre un champ très vaste. L'ouvrage le plus connu de Dr. Vijh est une monographie intitulée *Electrochemistry of Metals and Semiconductors*, qui a été publiée en 1973 et qui lui a valu cette année-là, en plus de l'admiration de scientifiques du monde entier, le Prix Lash Miller de l'Electrochemical Society.

L'électrochimie contemporaine est un domaine immense où l'on s'intéresse notamment aux réactions chimiques qui accompagnent la circulation de courants entre pôles chargés. Les recherches poussées de Dr. Vijh ont fait progresser la connaissance des procédés en usage dans les diverses industries électrochimiques (production de l'aluminum, du cuivre, du zinc, de la soude caustique, du chlore et du fluor) ainsi que dans la conversion et le stockage de l'énergie. La qualité de ses travaux a été reconnue par plusieurs distinctions et leur originalité est attestée par plus de quarante communications annonçant des découvertes importantes.

Dr. Vijh est né au Inde en 1938. Il a obtenu un baccalauréat et une maîtrise en sciences (respectivement en 1960 et 1961) de l'Université du Pendjab, et un doctorat de l'Université d'Ottawa en 1966. Il est entré à l'Institut de recherche de l'Hydro-Québec, à Varennes (Québec), en 1969 et il y est actuellement maître de recherche.

JASON A. HANNAH MEDAL

Jay Cassel

Dr. Jay Cassel is the author of *The Secret Plague: Venereal Disease in Canada, 1838-1939*, an extensively researched study of the problem of venereal disease in Canada and its attempted solution in the context of a changing society, changing ideas and a changing science of medicine. His well-documented and well-written study also presents the issue in the context of the world scene.

Dr. Cassel was born in New York City in 1958. He received his B.A. (1980) from Oxford University, his M.A. (1981) from Queen's University, and his Ph.D. (1988) from the University of Toronto.

INNIS-GÉRIN MEDAL

Albert Faucher, M.S.R.C.

M. Faucher est un spécialiste de l'histoire économique et un universitaire de grand renom. Ses collègues reconnaissent en lui un esprit indépendant, un penseur original et un intellectuel dynamique et fécond.

Ses travaux sur l'histoire du mouvement coopératif, sur les coopératives agricoles et sur les coopératives de consommation l'ont fait connaître à l'extérieur du Québec. M. Faucher s'intéresse notamment à la place du Québec dans l'économie nord-américaine, aux relations entre l'état et les institutions financières, à l'émigration massive des Canadiens français aux états-Unis au cours du dix-neuvième siècle, ainsi qu'au déclin des chantiers navals au Québec. Dans ses différentes études, M. Faucher s'oppose à ceux qui attribuent le sous-développement économique de la province de Québec à des facteurs d'ordre politique. En préconisant une approche plus globale, il fait ressortir l'importance de facteurs liés à la situation géographique et à l'avancement technique dont l'influence s'exerce sur tout le continent. De même, ses études sur l'industrialisation du Québec sont celles qui révèlent le mieux l'importance des ressources naturelles, comme l'hydro-électricité, dans la naissance du Québec moderne. Son ouvrage intitulé *Québec en Amérique au XIXe siècle* (1973) lui a valu le Prix du Gouverneur général.

M. Faucher est né dans la Beauce québécoise en 1915. Il a obtenu son baccalauréat ès arts (1938) de l'Université de Montréal et sa maîtrise ès arts (1954) de l'University of Toronto. Il est entré en 1950 à l'Université Laval où il détient le titre de professeur émérite.

McLAUGHLIN MEDAL

Samuel Solomon, F.R.S.C.

Dr. Solomon has a distinguished research career in the fields of endocrinology and reproductive biology. He began as a steroid biochemist interested in reproductive biology and has become an expert in fetal biochemistry and peptide chemistry.

Dr. Solomon and his laboratory associates pioneered substantial advances in our understanding of the complex nature of steroid metabolism. His work on the placenta and the chemical characterization of corticotrophic and other peptides has won him worldwide recognition. His studies on developmental changes in fetal endocrine systems are regarded by many as being at the frontiers of biomedical science.

As a tireless advocate of medical science research, he has encouraged governments and agencies to recognize its importance with an appropriate level of support.

WILLET G. MILLER MEDAL

William Henry Mathews, F.R.S.C.

Dr. William Henry Mathews of the University of British Columbia has made outstanding research contributions to a wide variety of geological subfields. His more than six score papers constitute a record of remarkable versatility, with internationally recognized contributions to glaciology, geomorphology, volcanology, geochronometry and coal geology, to name but only some of the Earth science disciplines touched and illuminated by his research.

His work on flash floods of glacial origin is a classic, as is his analysis (with K.C. McTaggart) of the Hope landslide. He and Ross Mackay gave the first explanation of local thrust faulting due to pore pressure buildup beneath advancing ice sheets. He provided some of the earliest radiocarbon dates of ash falls in British Columbia, and applied potassium-argon dating to Cenozoic stratigraphy and reset metamorphic terranes in that province. He has integrated geothermal ideas and observations with studies of coal maturity and permafrost, and investigated the vertical distribution of velocity in the Salmon Glacier. His catholicity of interests, reaching into every corner of geology, is marked also by his enthusiasm for mountaineering, where his ability to outperform students on long traverses has given rise to a field school legend.

LORNE PIERCE MEDAL

Maurice Lemire, M.S.R.C.

M. Lemire a beaucoup contribué à faire connaître la littérature du Québec, en encourageant autant qu'il le pouvait les études et la recherche dans le domaine. Voué depuis 1958 à cette mission, voilà donc plus de trente ans qu'il s'attache à étudier le phénomène littéraire au Canada français afin d'en mesurer l'importance et d'en déterminer les lignes de force.

Il a été le concepteur, le promoteur et le réalisateur de *Dictionnaire des oeuvres littéraires du Québec*, dont la qualité des volumes parus a été acclamée à l'unanimité par la critique. Toutes ses analyses sont situées dans le contexte socioculturel québécois, ce qui lui permet d'examiner l'influence de la société sur l'oeuvre d'un auteur, et inversement, l'influence de cet oeuvre sur les idéologies courantes ou les structures sociales. Il faut aussi signaler la part importante que M. Lemire a pris dans la création du Centre de recherche en littérature québécoise (CRELIQ) de l'Université Laval.

M. Lemire est né en 1927 à Saint-Gabriel de Brandon, au Québec. Il a reçu son baccalauréat ès arts du collège Jean-de-Brébeuf en 1949, sa licence en théologie de l'Université de Montréal en 1953, sa licence ès lettres de l'Université de Paris en 1957, et son D.E.S. ainsi que son doctorat ès lettres de l'Université Laval, en 1962 et en 1966. Il a en outre occupé plusieurs postes administratifs à l'Université Laval.

THE RUTHERFORD MEDAL IN CHEMISTRY

Peter Hackett

Dr. Hackett is a pioneering and innovative photochemist who has made seminal contributions to the development of photochemical techniques and the analysis and interpretation of photochemical data.

His early work was concerned primarily with gas phase photochemistry; his work on the photochemistry of fluorinated acetone classic. His infra-red multiphoton isotope separation project set a standard that serves as a gauge to subsequent work. His more current research has been directed to both exploiting and developing laser technologies to solve a wide range of chemical problems. His latest work on the production and characterization of reactive species in molecular beams is of the highest international caliber.

THE RUTHERFORD MEDAL IN PHYSICS

Nathan Isgur, F.R.S.C.

Dr. Isgur has made important contributions to the field of elementary particle physics, especially to hadron spectroscopy and the quark model. His earliest contribution in this field is the explanation of the mixings in isocalar mesons where he pointed out the importance of the annihilation graphs in the pseudoscalar sector where large mixings were known to occur. This mechanism resolved a long-standing puzzle on the mixing angles in pseudoscalar mesons. More recently, Dr. Isgur has generalized the quark model to include excitations of the string connecting quarks to anti-quarks, leading to very interesting predictions for the masses and decay modes of so-called hybrid mesons.

HENRY MARSHALL TORY MEDAL

Boris Stoicheff, F.R.S.C.

Dr. Stoicheff has a worldwide reputation for his basic work in Raman spectroscopy and for his more recent work in laser physics and laser spectroscopy. He is credited with the discovery of the inverse Raman effect from work with lasers in his Raman studies, and for the first observation of thermal shear waves in liquids.

He improved the technique of high resolution Raman spectroscopy to the point where he could resolve rotational Raman spectra of many diatomic and simple polyatomic molecules, the analysis of which provided information about their geometric structures. This work provided the definitive and precise determination of the structure of the benzene molecule. Lately, Dr. Stoicheff and his students have been successful in extending laser spectroscopy to the far ultraviolet region.

Reports of Academies
Rapports des Académies

ACADÉMIE I: ACADÉMIE DES LETTRES ET DES SCIENCES HUMAINES

Procès-verbal de l'assemblée annuelle
Université Laval, Ste-Foy, Québec
Le 6 juin 1989 à 12h00

1. L'ordre du jour est adopté à l'unanimité.

2. Le procès-verbal de la dernière assemblée annuelle, le 6 juin 1988 à l'Université de Windsor, Windsor, est adopté à l'unanimité.

3. N. Kattan présente un bref bilan de ses activités comme président (présenté en annexe).

4. La question de la langue des documents officiels de la Société soulève une discussion. En ce qui concerne la qualité du français, on se met vite d'accord pour constater qu'elle laisse à désirer et pour appuyer toute proposition que le conseil de l'Académie voudra bien présenter à cet égard au conseil de la Société : La "féminisation" fait toutefois problème. L'enjeu : retirer des documents officiels leur dimension sexiste sans porter atteinte à la langue. Par un vote de 16 en faveur, 8 contre et une abstention on vote la proposition suivante préparée par le conseil de l'Académie :

> Que la position de l'Académie des lettres et des sciences humaines sur la question de la "féminisation" des documents officiels en français de la Société soit de se conformer dans la mesure du possible aux pratiques suggérées par l'Office de la langue française du Québec.

On insiste sur les nuances qu'implique le syntagme "dans la mesure du possible" et la suggestion est faite de continuer à réfléchir sur ce point.

5. et 6. Un vote unanime appuie :

a) la prolongation des mandats en cours,

b) les nominations proposées par le conseil aux postes des comités de l'Académie:

G. Paquet, président; C. Moisan, vice-président; J. Demers, secrétaire; N. Kattan, ancien président. Les autres membres sont Jean-Denis Gendron (comme conseiller), Andrée Désilets, François Duchesneau, Maurice Lebel, Pierre Camu, Louis Sabourin, et Guy Sylvestre.

Les autres nominations sont :

Comité des candidatures : Paul-Yves Denis, Gérard Bouchard, André Morel
Médaille Hannah : François Duchesneau (présidence)
Médaille Chauveau : Laurent Mailhot
Médaille Innis-Gérin : René Dussault
Médailee Lorne-Pierce : Naïm Kattan
Konrad Adenauer Award : Jacques Brazeau
Comité des distinctions extérieurs : Louis Sabourin
Comité des colloques : Louise Marcil-Lacoste
Comité des relations internationales : René de Chantal
Comité de la liberté académique : Eva Kushner
Comité d'évaluation de la recherche : Louise Marcil-Lacoste

7. Le nouveau président, M. Gilles Paquet prend la parole. Il revient sur la question du français qu'il juge urgent de régler. Il insiste ensuite sur la nécessité d'améliorer l'appareil de gestion de la Société et il se dit particulièrement heureux de la prochaine nomination du juge Jules Deschênes, au titre de président-élu et de M. Pierre Camu, au titre de secrétaire. Leur présence, précise-t-il à des postes stratégiques de la Société ne peut que favoriser une meilleur visibilité de l'Académie des lettres et des sciences humaines. Encore faut-il que les membres soient actifs, qu'ils prennent connaissance du plan de développement, qu'ils fassent des suggestions, etc. Le président rappelle que le grand avantage de la Société c'est de pouvoir travailler dans le transdisciplinaire, donc d'aborder les problèmes autrement que le font habituellement les différentes disciplines. Il se dit d'accord avec M. Kattan en ce qui concerne l'importance des rapports internationaux et il le remercie pour les amorces faites. Pour terminer M. Paquet rappelle d'une part que la responsabilité d'une grande revue bilingue destinée à promouvoir la publication scientifique en français a été confiée à la Société et d'autre part qu'une somme importante doit être allouée à la Société et qu'il faut l'utiliser le mieux possible. Il remercie les membres qui lui ont fait unanimement confiance et assure qu'il fera tout pour ne pas les décevoir; ils peuvent compter aussi qu'il les contactera individuellement au besoin.

Suite aux commentaires de M. Paquet, on signale l'existence d'un rapport sur l'animation parmi les membres de l'Académie et on souhaite que le nombre des membres de l'Académie au comité des relations extérieures soit augmenté. On lance aussi l'idée de privilégier un ou deux projets de recherche ayant un impact national.

8. L'Assemblée vote ensuite des remerciements au président sortant, M. Naïm Kattan.

La séance est levée à 14h00.

Jeanne Demers
Secrétaire, Académie des lettres et des sciences humaines.

ANNEXE A: Rapport du Président sortant

Le Président sortant de l'Académie des lettres et des sciences humaines, Naïm Kattan

Au terme de mon mandat de Président de l'Académie des lettres et des science humaines, je voudrais tout d'abord dire que j'ai été heureux de vivre, dans l'intensité, cette période de transformation de notre Société.

Notre Académie a participé activement à cette transformation et j'espère que nous allons continuer à jouer le rôle qui nous revient dans la nouvelle étape de la vie de la Société.

Par ailleurs, nous avons eu une grande période d'activités. Le point de départ a été la réception organisée pour la remise du Prix de la Francophonie au Sommet de la francophonie à Québec, à monsieur Georges Schéhadé par Son Excellence le Gouverneur Général du Canada, Madame Jeanne Sauvé.

Notre Académie a tenté d'amplifier nos rapports avec des académies étrangères et notamment les académies francophones. J'ai représenté la Société au Cinquantenaire de l'Académie Royale de Belgique et j'ai établi des contacts avec plusieurs académiciens lors de cette visite.

Nous avons eu plusieurs séances de réception de nouveaux membres.

Notre Académie va donner suite au rapport Demers-Beaulne pour prendre l'initiative de susciter des nominations dans les diverses disciplines représentées dans notre Académie.

J'ai été heureux de travailler avec les membres des autres académies. Je souhaite à mon successeur, Gilles Paquet, des années aussi fructueuses que furent les miennes au cours de mon mandat.

ACADEMY II: ACADEMY OF HUMANITIES AND SOCIAL SCIENCES

Annual Business Meeting
Université Laval
6 June, 1989

The meeting was called to order at 13:35 hrs. Present: J.A. Laponce (Chair), R. Craig Brown (Vice-President), A. Kirk Grayson (Acting Honorary Secretary), and approximately 12 other members.

1. The minutes of the annual business meeting held at the University of Windsor on 7 June, 1988, were approved without amendment.

2. Matters arising from the minutes: none.

3. *President's Report.*

a. Reorganization of the Council and New Fellow's Committee: The President brought forward a motion from the meeting of Council in January in this regard. The motion reads:

> The Committee on New Fellows on Academy II shall consist of the elected members of the Council of Academy II and the President, Vice-President, and Secretary of the Academy. The President may appoint, from among the elected members of the Committee on New Fellows, Chairs of sub-committees who, with other Fellows of the Academy co-ópted by the Chairs, assist the New Fellows' Committee in the generation of nominations of scholars to the Committee on New Fellows. The sub-committees might assume this responsibility either for a group of disciplines (for example, humanities -- languages, and literature, other humanities, social sciences) or for the purpose of seeking a better balance of representation of the sexes, disciplines, and regions of Canada in the membership of the Academy.

The motion was seconded by R. Craig Brown. The motion was approved. R. Craig Brown presented on behalf of Karol Krótki a list of nominations and previously elected members for the newly-formed Council and New Fellows' Committee. This list (see Attachment A) was approved.

b. Budget. The President reported that for the first time Academy II had its own budget and he presented an itemized proposal for the use of this budget in the forthcoming year (see Attachment B). This budget was approved.

c. The President reported upon discussions involving the proposed amendments to the constitution as circulated from the Ottawa office on 29 May, 1989. He reported that the Council of Academy II had objected in particular to the "special business meeting" and the proposed revision of the constitution by a mail ballot. He reported that discussions with the Executive of the Society since the meeting of the Council of Academy II on 4 June had satisfactorily resolved difficulties. A revised form of amendments would be presented to the Annual Business Meeting of the Society later in the day.

d. The President reported that there were twenty New Fellows to be elected this year.

e. The President reported briefly on the arrangements for the meeting at the University of Victoria in 1990 and the meeting at Queen's University in 1991.

4. *Vice-President's Report*. R. Craig Brown reported that he had been asked to take charge of the program for the University of Victoria meetings in 1990 and gave a brief outline of the arrangements.

5. *Honorary Secretary's Report*. In the absence of the Honorary Secretary, Tony Richmond, who was ill, the President presented his report. The following deaths of Fellows have been reported to the Secretary since the meeting in June 1988: G.M. Craig, G.A. Elliot, G.P. Grant, J.W. Holmes, F.E.L. Priestley, A.W. Trueman, W. Warntz, F.V. Winnett.

6. *Nominating Committee*. On behalf of Karol Krótki, R. Craig Brown presented the Committee's nominations for medals and awards (see Attachment C). It was moved by R. Craig Brown and seconded by Douglas Tushingham that this report be accepted. The motion was approved.

7. *Report of the Symposium Committee*. James Leith presented details on various proposals on symposia which were in progress.

8. *Honorary Editor's Report*. John Robson presented a brief report on various items which had been published or were soon to be published.

There being no other business, the meeting adjourned at 14:55 hrs.

A. Kirk Grayson, Acting Secretary

ATTACHMENT A: REPORT OF THE COUNCIL AND NEW FELLOWS COMMMITTEE

EXECUTIVE

J.A. Laponce (Political Science, UBC), President 1988-1991
R. Craig Brown (History, Toronto), Vice-President, 1988-1991
K.J. Krótki (Sociology, Alberta), Past President 1988-1991
A. Kirk Grayson (Near East Studies, Toronto), Secretary 1989-1992

David Braybrooke (Philosophy, Dalhousie), 1989-1991
Douglas G. Lochhead (Library Science, Mount Allison), 1989-1991
Juliet McMaster (English, Edmonton), 1988-1990
Ann Saddlemeyer (Drama, Massey College, Toronto), 1989-1991
Pamela Stewart (Italian, McGill), 1988-1990
James Tuck (Archeology, Memorial), 1989-91
Mario Valdes (Comparative Literature, Toronto), 1988-1990
Sidney F. Wise (History, Carleton), 1988-1990

(plus *ex officio*: President of the Society, Honorary Editor of the Society, Symposia Committee Chair, and Editor of Academy II)

ATTACHMENT B: BUDGET

Secretary's Office	$ 4,000
Meetings of NF and Council, Executive	$ 6,000
Victoria Meeting	$ 2,000
Regional Meetings	$ 2,000
Seed money for Symposia	$ 2,000
Miscellaneous	$ 500
TOTAL	$16,500

ATTACHMENT C: *Nominations Committee* Report

Chauveau Medal	Keith Ellis (1989-1993) (in place of D. Fishwick)
Jason A. Hannah Medal	Kenneth D. McRae (1989-91) (in place of I.M. Hacking)
Innis-Gérin Medal	Gideon Rosenbluth (1989- 1993) (in place of F.T. Denton)

External Awards	Nico Stehr (1989-1991) (in place of Juliet McMaster)
International Relations	Karol J. Krótki (1989-1991) (in place of S. Trofimenkoff)

ACADEMY III: ACADEMY OF SCIENCE/ ACADEMIE III: ACADÉMIE DES SCIENCES

Minutes of the Annual Business Meeting,
Université Laval
5 June, 1989

About fifty Fellows were present.

Minutes: A motion to approve the minutes of last year's meeting was adopted unanimously.

President's Report: The President brought Fellows up-to-date on the activities of the Society, outlining its transformation from a largely honorific function to a proactive force in Canadian society. He noted that Council has been very active. Last September it had been addressed by Frank Oberle, the then Minister of State for Science and Technology. In his speech, Mr. Oberle had announced that the Government could no longer afford to do without the help of the Royal Society, and would therefore give the Society a grant to help prepare its Development Plan. Here Dr. McCulloch paid tribute to Dr. McLaren, the President of the Society, whose energetic leadership had been in evidence throughout the year. The January meeting of Council had been addressed by the President of MRC, and had received the formal report of CORAS (Committee on the Restructuring of the Academy of Science). The Executive had been instructed to make a detailed study of the report. The Executive had met, had prepared an Executive response to the report, and had called for a special meeting of Council to consider the report and the Executive response. Council had met all day on Saturday, 3 June, and considered the matter in great detail. The Fellows present at this General meeting would be asked to comment on and approve the outcome of all these deliberations.

The President noted that he had been invited to represent the Royal Society at a meeting of the Canadian Academy of Engineers on Technology Transfer. We look forward to close and cordial relations with the Engineers. He had also attended the spring meeting of COPSE (Committee of Parliamentarians, Scientists and Engineers) which had dealt with Public Awareness of Science. It had been a most satisfactory

meeting, and he commended Ward Neale on the fine work he was doing in this area.

He ended his report by congratulating all those present who had just been elected to the Academy of Science.

He then presented the report of the Nominating Committee. Only one office was to be filled this year. The unanimous nomination for Vice-President was Dr. Chris Barnes. No other nominations being forthcoming, Dr. Barnes was declared elected.

Section Reports:

Physics: 15 Fellows present. Officers elected - Convenor: J. Hardy; Rapporteur: A. Carswell.

Chemistry: Fellows were holding their business meeting at the CIC in Victoria.

Mathematics: Business meeting held in December at annual meeting of Canadian Mathematics Society. Officers elected - Convenor: J. Arthur; Rapporteur: D. Handelman. It was regretted that the Section still contained no women, and only one Francophone.

Interdisciplinary: 6 Fellows present. Officers reelected - Convenor: L. Mysak; Rapporteur: R. Haynes.

Earth Science: 12 Fellows present. Officers elected - Convenor: S.D. Scott; Rapporteur: C. Keen.

Applied Science: 5 Fellows present. Officers elected - Convenor: M. Païdoussis; Rapporteur: A. Vijh.

Plant Biology: 8 Fellows present. Officers elected - Convenor: M. McCully; Rapporteur: J.E. Thompson.

Animal Biology: 3 Fellows present. Officers reelected - Convenor: D. Mettrick; Rapporteur: J.G. Eales.

Microbiology and Biochemistry: 5 Fellows present. Officers elected - Convenor: R. MacLeod; Rapporteur: T. Beveridge.

Medical Science: 9 Fellows present. Officers elected - Convenor: P.T. Macklem; Rapporteur: A. Rothstein.

Society President McLaren felt that the Society is failing if its members attend meetings of their own discipline rather than of the RSC. The two

are for different purposes. We all attend meetings of our own discipline, but we should also be eager to meet with Fellows from other disciplines and discuss matters of common interest.

CORAS REPORT: Dr. McCulloch introduced the report, which was presented by Dr. Barnes. After each Recommendation had been discussed, the following votes were taken on motions to approve the recommendations (Barnes/Kendrick).

Recommendation 1. Approved (47-3)

Recommendation 2. Approved unanimously

Recommendation 3. Approved (45-5)

Recommendation 4. Approved (47-2)

Recommendation 5. Tabled

Recommendation 6. Approved unanimously

Recommendation 7. Approved unanimously

Recommendation 8. An amendment (Hardy/Simpson) that "the CFRC cannot change more than 20% of the ranked lists submitted to it by the DFRCs" was approved. A motion (Barnes/Kendrick) to accept Rec. 8 as amended, was approved.

Recommendation 9. A motion (MacLeod/Simpson) that "the annual quota of Fellows for the life sciences be raised from 12 to 24" was defeated. A motion (Stewart/Newman) that "Council examine the various disciplinary groups and, where anomalies are recognized, Council be empowered to make an adjustment of more than 20% to the DFRC lists in order to eliminate such anomalies over a short period of time" was defeated. It was agreed that the phrase "(e.g. gender, regional, discipline)" be deleted from Rec. 9. A motion (Barnes/Mysak) that Rec. 9 as amended be accepted, was approved.

Recommendation 10. Dr. McCulloch advised that Council had devised a new wording, as follows: "That the Academy actively seek areas or programs of direct action in which the joint efforts by the Academy of Science and the Academy of Engineering can proceed". This new wording was approved.

Recommendations 11-16. A motion (Simpson/Newman) to accept these recommendations was approved.

Recommendation 17. It was agreed that this was a procedural action, and that Council should take all necessary actions to implement the CORAS recommendations that had been amended and approved.

Dr. McCulloch indicated that, considering the lateness of the hour, the remaining items on the agenda (program and projects) would be deferred, and would be dealt with by Council at its next meeting.

A motion (Bousfield/Scott) to adjourn was approved.

B. Kendrick, Secretary

Order of Proceedings for the Annual Meeting
Programme de l'Assemblée annuelle

ORDER OF PROCEEDINGS

Saturday, June 3, 1989

09:00-17:00	**Academy III**	**Council**
19:30-20:00	**Society**	**Editorial and publications**
20:00-21:00	**Society**	**Committee on Symposia**

Sunday, June 4

09:00-18:00	**Society**	**Registration and signing-in**
09:30	**Academy III**	**Council**
10:00	**Académie I**	**Conseil**
10:00	**Academy II**	**Council**
10:30	**Society**	**International Relations**
10:30	**Society**	**Finance Committee**
12:00	**Society**	**Open Luncheon**
12:15	**Society**	**Executive Committee**
14:00	**Society**	**Council**
17:30	**Society**	**Open Supper**
18:00	**Buffet Supper**	
19:30	**Society**	**New Fellows Assemble**

19:45	**Society**	**Officers Assemble**
20:00	**Society**	**Induction Ceremony**
	Address of Welcome: Dr. Michel Gervais, LTh, LPh, DTh, Recteur de l'Université Laval	
	Presentation of New Fellows	
21:30	**Society**	**Reception for New Fellows** **Hosted by the University**

Monday, June 5

08:00- 12:00	**Society**	**Registration and signing-in**
08:30- 12:00	**Academy III**	**Symposium:** **PUBLIC AWARENESS OF SCIENCE**
	Chairperson: Louis Berlinguet Institut de Recherche en Santé et Sécurité du Travail du Québec	
	Mr. William Winegard, Minister of State (Science & Technology), Opening statement	
	Geraldine Kenney-Wallace, President Science Council of Canada, "The Role of the Scientist"	
	Panel discussion: Lise Bissonnette, Larkin Kerwin, E.R. Ward Neale	
	Co-chairperson: Roger Blais	
	Mario Benge, McGill University "The needs of society regarding science and the expectation toward the scientist"	
	Panel discussion: Hélène Denis, Jean Marc Gagnon	
09:00- 17:00	**Academy II**	**Symposium: STATE AND THE ARTS**
	Chairperson: John Meisel, Queen's University "Political Culture and the Politics of Culture - The Sequel"	

Harry Chartrand, Canada Council, "The Hard Facts: Perspectives of Cultural Economics"

Peter Harcourt, Carleton University, "A Moving Target: Federal Film Policy within a Global Culture"

G. Hamilton Southam, "Striving for excellence: mass/elite tensions in cultural policy"

John Meisel, Queen's University, "Fanning the Air: The Canadian State and Broadcasting"

Ted Magder, Wilfrid Laurier University, "Canada's Hollywood: The State and Film Making in Canada"

12:15-14:00	**Society**	Luncheon Speaker: Dr. John Polanyi, "Responsibilities of the Scientist"
14:00-15:00	**Academy III**	Business Meetings
15:00-16:00	**Academy III**	Annual Business meeting
16:00-17:00	**Academy III**	Medallists Speak

Tuesday, June 6

09:00-12:00	**Society**	Society Symposium: **PROGRESS**

J.A. Leith, Queen's University, Introduction: "L'évolution de l'idée de progrès à travers l'histoire"

Brian Baigrie, University of Calgary, "Relativism, Truth and Progress"

James Tully, McGill University, "Progress and Scepticism 1789-1989"

William Leiss, Simon Fraser University, "The Idols of Technology"

Louise Marcil-Lacoste, Université de Montréal, "C'est la faute à Voltaire, C'est la faute à Rousseau"

12:00-14:00	**Académie I**	Assemblée générale annuelle

12:00-13:30	**Academy II**	**Lunch - New Fellows**
12:00-13:00	**Academy III**	**Lunch**
13:30-15:00	**Academy II**	**Annual Business Meeting**
15:00-17:30	**Society**	**Annual Business Meeting**
18:30-19:45	**Society**	**Reception, City Hall** Offerte par le Maire de la Ville de Québec
20:00-22:00	**Society**	**Annual Banquet**

Presentation of Society Awards:

The Chauveau Medal: John M. Robson
The William Dawson Award: Henry G. Thode
The Thomas W. Eadie Medal: Ashok K. Vijh
The Jason A. Hannah Medal: Jay Cassel
The Innis-Gérin Medal: Albert Faucher
The McLaughlin Medal: Samuel Solomon,
Adolfo J. de Bold (1988)
The Willet G. Miller Medal: William Henry Mathews
The Lorne Pierce Medal: Maurice Lemire
The Rutherford Medal in Chemistry: Peter A. Hackett
The Rutherford Medal in Physics: Nathan Isgur
The Marshall Tory Medal: Boris Stoicheff

Wednesday, June 7

09:00-12:00	**Academy II**	**Symposium:** **FIGURES IN THE ROUND**

Chairperson: Francess G. Halpenny, University of Toronto

J.M. Robson, University of Toronto, "The eloquent voice of liberal England: the Collected Works of John Stuart Mill"

Mary Jane Edwards, Carleton University, "'The picture's true': The Centre for Editing Early Canadian Texts"

John A. Walker, University of Toronto, "The 'Belle Epoque' day by day: La Correspondance d'Emile Zola"

09:00- 17:00	**Académie I**	Colloque : **NATIONALISME ET DIVERSITÉ CULTURELLE AU QUÉBEC**
09:00- 10:30	Session I : "Légitimité du nationalisme Québécois?"	
	Hubert Guindon, Concordia University	
	Gérard Bouchard, Université du Québec à Chicoutimi, "Sur l'avenir du nationalisme québécois dans une perspective interethnique et internationale"	
10:45- 12:00	Session II : "Le devenir des communautés et des rapports ethniques"	
	Gary Caldwell, Institut québécois de recherche sur la culture, Québec, "Le devenir des communautés et des rapports ethniques"	
	Benjamin Teitelbaum, Option-Communication, Montréal, "Le declin de l'empire québécois ou sont passer les minorités?"	
12:00- 14:00	**Lunch**	
14:00- 15:45	Session III : "Les droits collectifs peuvent-ils primer les libertés individuelles?"	
	Henri Brun, Université Laval, "Le difficile équilibre entre droits individuels et droits collectifs"	
	Guy Rocher, Université de Montréal, "Les droits collectifs peuvent-ils primer les libertés individuelles?"	
15:45- 17:00	Session IV : "Pour un modèle québécois de gestion des rapports ethniques?"	
	Gilles Paquet, Université d'Ottawa, "Pour une notion renouvelée de citoyenneté"	
	William Tetley, McGill University, "Les anglophones au Québec et les droits linguistiques"	
12:00- 14:00	**Académie I** **Academy III**	Déjeuner libre Open Luncheon
12:00- 14:00	**Academy II**	Luncheon: New Fellows are introduced

13:00	**Society**	**Luncheon: New Council/Executive**
14:00-16:00	**Society**	**New Council**
16:00-17:00	**Society**	**New Executive**

PROGRAMME

Samedi, 3 juin 1989

09h00- 17h00	**Académie III**	Conseil
19h30- 20h00	**Société**	Comité des publications
20h00- 21h00	**Société**	Comité des colloques

Dimanche, 4 juin

09h00- 18h00	**Société**	Inscription
09h30	**Académie III**	Conseil
10h00	**Académie I**	Conseil
10h00	**Academy II**	Council
10h30	**Société**	Comité des relations internationales
10:30	**Société**	Comité des finances
12h00	**Société**	Repas libre
12h15	**Société**	Comité exécutif
14h00	**Société**	Conseil
17h30	**Société**	Repas libre
18h00	Souper buffet	
19h30	**Société**	Rencontre des nouveaux membres
19h45	**Société**	Rencontre du groupe de la tribune
20h00	**Société**	Cérémonie d'investiture

Accueil : Dr. Michel Gervais, LTh, LPh, DTh,
Recteur de l'Université Laval
Présentation des nouveaux membres

21h30	**Société**	**Réception pour les nouveaux membres offerte par l'Université**

Lundi, 5 juin

08h00-12h00	**Société**	Inscription
08h30-12h00	**Académie III**	Colloque : **PUBLIC AWARENESS OF SCIENCE**

Président : Louis Berlinguet, Institut de Recherche en Santé et Sécurité du Travail du Québec

William Winegard, Ministre, Science & Technologie Discours d'ouverture

Geraldine Kenney-Wallace, Présidente, Conseil des sciences Canada, "The Role of the Scientist"

Discussion : Lise Bissonnette, Larkin Kerwin, E.R. Ward Neale

Co-président: Roger Blais

Mario Benge, McGill University, "The needs of society regarding science and the expectation toward the scientist"

Discussion : Hélène Denis, Jean Marc Gagnon

09h00-17h00	**Academy II**	Colloque: **STATE AND THE ARTS**

Chairperson: John Meisel, Queen's University "Political Culture and the Politics of Culture - The Sequel"

Harry Chartrand, Conseil des Arts du Canada "The Hard Facts: Perspectives of Cultural Economics"

Peter Harcourt, Carleton University, "A Moving Target: Film Policy"

G. Hamilton Southam, "Striving for excellence: mass/elite tensions in cultural policy"

John Meisel, Queen's University, "Fanning the Air: The Canadian State and Broadcasting"

Ted Magder, Wilfrid Laurier University, "Canada's Hollywood: The State and Film Making in Canada"

12h15- 14h00	**Société**	Déjeuner, Conférencier : Dr. John Polanyi, "Responsibilities of the Scientist"
14h00- 15h00	**Académie III**	Assemblée générale des sous-sections
15h00- 16h00	**Académie III**	Assemblée générale
16h00- 17h00	**Académie III**	Les lauréats de distinctions se présentent

Mardi, 6 juin

09h00- 12h00	**Société**	Colloque de la Société : **LE PROGRÈS**

J.A. Leith, Queen's University, Introduction : "L'évolution de l'idée de progrès à travers l'histoire"

Brian Baigrie, University of Calgary, "Relativism, Truth and Progress"

James Tully, McGill University, "Scientific Progress and Scepticism 1789-1989"

William Leiss, Simon Fraser University, "The Idols of Technology"

Louise Marcil-Lacoste, Université de Montréal, "C'est la faute à Voltaire, C'est la faute à Rousseau"

12h00- 14h00	**Académie I**	Assemblée générale annuelle
12h00- 13h30	**Academy II**	Luncheon - New Fellows
12h00- 13h00	**Académie III**	Déjeuner
13h30- 15h00	**Academy II**	Annual Business meeting

15h00-
17h30 **Société** Assemblée générale

18h30- **Société** Réception, Hôtel de Ville
19h45 Offerte par le Maire de la Ville de Québec

20h00-
22h00 **Société** Banquet annuel

Présentation des médailles de la Société

La médaille Chauveau : John M. Robson
La médaille William Dawson : Henry G. Thode
La médaille Thomas W. Eadie : Ashok K. Vijh
La médaille Jason A. Hannah : Jay Cassel
La médaille Innis-Gérin : Albert Faucher
La médaille McLaughlin : Samuel Solomon
Adolfo J. de Bold (1988)
La médaille Willet G. Miller : William Henry Mathews
La médaille Lorne Pierce : Maurice Lemire
La médaille Rutherford en chimie : Peter A. Hackett
La médaille Rutherford en physique : Nathan Isgur
La médaille Marshall Tory : Boris Stoicheff

Mercredi, 7 juin

09h00- **Academy II** Symposium:
12h00 **FIGURES IN THE ROUND**

Chairperson: Francess G. Halpenny, University of Toronto

John M. Robson, University of Toronto, "The eloquent voice of liberal England: the Collected Works of John Stuart Mill"

Mary Jane Edwards, Carleton University, "'The picture's true': The Centre for Editing Early Canadian Texts"

John A. Walker, University of Toronto, "The 'Belle Epoque' day by day: La Correspondance d'Emile Zola"

09h00- **Académie I** Colloque : **NATIONALISME ET**
17h00 **DIVERSITÉ CULTURELLE AU QUÉBEC**

09h00-
10h30 Session I : "Légitimité du nationalisme Québecois?"

Hubert Guindon, Concordia University

Gérard Bouchard, Université du Québec à Chicoutimi, "Sur l'avenir du nationalisme québécois dans une perspective interethnique et internationale"

10h45 – 12h00 — Session II : "Le devenir des communautés et des rapports ethniques"

Gary Caldwell, Institut québécois de recherche sur la culture, Québec, "Le devenir des communautés et des rapports ethniques"

Benjamin Teitelbaum, Option-Communication, Montréal "Le déclin de l'empire québécois ou sont passer les minorités?"

12h00 – 14h00 — **Déjeuner**

14h00 – 15h45 — Session III : "Les droits collectifs peuvent-ils primer les libertés individuelles?"

Henri Brun, Université Laval, "Le difficile équilibre entre droits individuels et droits collectifs"

Guy Rocher, Université de Montréal, "Les droits collectifs peuvent-ils primer les libertés individuelles?

15h45 – 17h00 — Session IV : "Pour un modèle québécois de gestion des rapports ethniques?"

Gilles Paquet, Université d'Ottawa, "Pour une notion renouvelée de citoyenneté"

William Telley, McGill University, "Les anglophones au Québec et les droits linguistiques"

12h00 – 14h00	**Académie I** **Académie III**	Déjeuner libre
12h00 – 14h00	**Academy II**	Luncheon: New Fellows are introduced
13h00	**Société**	Déjeuner : Nouveau Conseil/Exécutif
14h00 – 16h00	**Société**	Nouveau Conseil
16h00 – 17h00	**Société**	Nouvel Exécutif

ADDRESS TO THE SOCIETY AT THE ANNUAL DINNER/ ADRESSE AUX MEMBRES AU BANQUET ANNUELLE

4 June, 1989

by

DIGBY J. McLAREN, PRESIDENT

L'une des tâches très agréables qui m'incombent en tant que président de notre Société consiste à accueillir les nouveaux membres rassemblés ici et élus par leurs pairs. Nous vous félicitons et vous souhaitons la bienvenue au sein de l'une de nos trois académies. In congratulating and welcoming you as new members of one of our three Academies, I think it is fair to say that no one can be indifferent to approval from colleagues whose judgment we value and on becoming part of an organization dedicated to excellence, however difficult that may be to define. This Society was founded in 1883 and was modelled on the Royal Society of London and l'Institut de France. There can, therefore, be no doubt about our terms of reference -- to further the arts and sciences.

L'élection au titre de membre confère un honneur et une obligation -- être au service de la connaissance, pour le bien de l'humanité et de notre pays. Vous devriez tous avoir reçu un exemplaire de notre nouveau Plan exécutif. J'espère que vous le lirez.

The Corporate Plan is the most complete analysis of the role of the Royal Society of Canada since its inception, and emphasizes the need to increase our effectiveness as a national academy. It also emphasizes our obligation to serve, and it is this message that I wish to bring to you this evening.

With increased and increasing financial support and demonstration of our capacity, greater demands will be made on us from outside the Society. En addition aux demandes de l'extérieurs, nous devons apprendre à être pro-actifs et à rechercher des moyens de mettre la gamme étonnamment vaste de nos talents à la disposition du gouvernement et des citoyens du Canada. Vous arrivez à la Société au moment où elle vit une période très excitante de son histoire.

You are becoming part of an institution that represents all disciplines of learning ranging from theology to astrophysics and, indeed, the gap between these extremes is now seen to be remarkably narrow, so that our apparently linear structure is in fact an all-embracing circle.

The sole justification for our existence must lie in the effectiveness with which we make our knowledge available to one another and the public. At a time of evident global crisis, we share the obligation to examine and analyse the problems faced by our race in its continued occupation of the planet, and these problems, without exception, involve disciplines in all sciences and the humanities.

Nous vous exhortons, vous les nouveaux membres distingués dans vos propres domaines de recherche et d'étude, à vous joindre à nous, pour apprendre comment généraliser votre recherche et la transformer en solutions à des problèmes interdisciplinaires et pour chercher à relier vos réalisations à des domaines plus vastes et à les communiquer à un auditoire plus étendu tant au Canada qu'à l'échelle mondiale. La Société est à l'image de ses membres. Considérerez-vous votre élection comme une obligation d'ajouter votre capacité à celle de vos confrères et de contribuer à structurer un organisme rajeuni et vital?

The Society is what its members make it. Will you look on your election as an obligation to add your capacity to that of your Fellows and to help structure a new and vital organism?

ADDRESS TO ACADEMY III SYMPOSIUM, 5 JUNE 1989
BY
THE HONOURABLE WILLIAM C. WINEGARD
MINISTER OF STATE (SCIENCE AND TECHNOLOGY)

It is a pleasure for me to be here this morning. I welcome the opportunity to discuss some of the vital science and technology issues of the day with a group of such eminent professionals. My presence here today, and the thoughts I am going to share with you, are particularly timely, given that each of you has a vital role to play in the national effort required to strengthen our capabilities in science and technology.

I find myself, this morning, with a window of opportunity. I am referring specifically to last week's announcement on the Government of Canada's funding for the Royal Society. It gives me the opportunity to use this occasion to throw out a challenge to a group of professionals who, through a wealth of ideas and experience, are capable of responding and contributing a great deal. I am not here to preach or to intimidate, rather I see my role as that of a motivator. I hope that my words will serve to mobilize the resources of the Fellowship and associates of the Royal Society *as a whole*.

In advance of this motivational exercise, I would like to limber up by sharing with you a quotation I read a short time ago: "The future belongs to science. More and more, she will control the destinies of the nations. Already she has them in her crucible and on her balances." I cannot lay claim to those words, although they bear a striking similarity to what I've been saying to groups across the country since I assumed my Cabinet responsibilities. They bear a striking similarity to what we have increasingly been hearing from industry leaders, from academics, and from the men and women in our scientific and research constituencies. Those words did not, however, come form a CEO or a university president. Those words were written 88 years ago by Sir William Osler, the eminent Canadian physician and educator, and were contained in the introduction to a biography of Pasteur. Sir William showed great vision, and I wonder what he would be writing if he were with us today. I have a feeling that he would be somewhat disturbed to find that, in the midst of a period of unprecedented technological change, we are still spending a great deal of our time echoing his thoughts, rather than acting decisively upon them.

As Canadians we have a lot to be thankful for. We have built a caring society for ourselves; a country with generous social programs; a country of seemingly limitless opportunity. To a great extent, we owe what we have today to science and technology. The energy and determination of our scientists and our engineers -- especially in the post-war years -- have made us what we are.

The challenge we face is to become a dramatically more competitive society. If we fail in this task, we risk losing the caring society we so treasure. Today's economic strength is in ideas and innovation, in science and technology. Knowledge has clearly become the primary commodity -- the basis of wealth -- in today's world.

We must achieve excellence in our national scientific effort, our research and development performance, and our development, acquisition and application of technology. We must achieve excellence in the innovation and creativity of our business and industrial management, and in the marketing of our goods and services on a worldwide scale. And, we must strive for excellence in human skills development at all levels of the education system. But there is one over-riding requirement. Not only must we achieve and maintain excellence in these separate endeavours, we must also integrate them all into a national effort shared by the science, technological and business communities, in partnership with government at all levels.

As a Government, we have recognized the integral role that the Royal Society, as Canada's national academy, can and must play in this national effort. That is why we have taken measures to provide you with financial support. You, the Royal Society of Canada, have a wealth of expertise, in all fields of scholarly inquiry. And, while yours is a tradition worthy of recognition, it had little bearing on our decision to provide you with funding. Our decision was based on the fact that the eminence, objectivity and range of expertise of the Society's Fellows and associates make it uniquely qualified and positioned to assume some vital tasks. When we made our decision we saw it as an *investment in potential*, and I make no apologies for that.

Unless Rip Van Winkle happens to be among us this morning, we all know that two words could suffice in describing the prevailing economic agenda of the government, and those words are *fiscal restraint*. Quite simply put, there are more demands being placed on government than can possibly be met, while maintaining the necessary commitment to deficit reduction. When we are asked to respond to a request for assistance, financial or otherwise, circumstances dictate that we carefully

review our priorities. By priorities, I mean those related to the social and economic welfare of the nation.

We see the Royal Society contributing substantially to our national economic and social goals. But, at the same time, we recognize that some internal, administrative urgencies must be addressed before you can effectively assume an enhanced role. In particular, I would stress the urgency which must be attached to consolidating your planning process, and here I refer to your Corporate Plan, as well as those for the Evaluation of Research, and the Advancement of Women in Scholarship. And, it is essential that the consensus reached through this planning process represent the Fellowship of the Royal Society as a whole.

The success of your efforts will also be determined, to a great extent, by the effectiveness with which you undertake consultation exercises with other learned societies and representatives from the scientific, research and educational constituencies. Clearly, one of your greatest assests as a Society -- the wide range of expertise possessed by your Fellows and associates -- can be significantly enhanced through a thorough consultation process. I believe that a strong commitment to *ongoing* consultation will also contribute to the objectives you have set for your campaign to raise additional core funds from the Provinces and the private sector.

A moment ago I referred to your plans for the Evaluation of Research, and the Advancement of Women in Scholarship. I would like to expand a bit on these subjects. I recognize that you are already proceeding with the initial stages of implementing your plan for the Evaluation of Research and that you will be starting with an examination of university research. The results of this work will be of great interest not only to the federal government, but to the private sector and the research community itself. As you may know, the NABST University Committee under Pierre Lortie recommended that Canadian university research be monitored and assessed regularly, and publicly, against that of other nations. We believe that the Royal Society is well-equipped to assume this task which, I acknowledge, is a formidable one. Having amongst your Fellowship the country's top minds in all disciplines, with access to all sectors as well as the wider international community, makes you uniquely qualified for this undertaking.

We see the Society playing a similarly important role in the advancement of women's place in Canadian intellectual life. The Government attaches great importance to the task of mobilizing women's participation in the natural sciences and engineering fields, in which they continue to be under-represented. Awarding to women at least half of

the Canada Scholarships for undergraduate studies in the natural sciences, engineering and related disciplines is but one example of our commitment to bringing about change in this area. You may also be aware that the Natural Sciences and Engineering Research Council (NSERC) is adopting measures to encourage women to pursue graduate studies and postdoctoral fellowships in these disciplines. Your plan for the Advancement of Women in Scholarship is a good point of departure. I hope and expect to see all of its recommendations implemented, starting with a commitment to accelerate the rate of nomination and election of women to the Fellowship. I am looking forward to reading your publication on the achievements of women Fellows. Why not build on this work, and include in it the stories of other women who have made an exceptional contribution to Canada?

I also support your plans to send eminent women professionals into the schools as role models. The more the Fellowship interacts with the general public, the more success you can expect in achieving your goal of promoting public awareness and understanding of science and technology. You have a major role to play in this regard -- we *all* must work to make science a real part of our culture. We must convince more Canadians that a technologically literate workforce is a condition of continued or increasing national prosperity. We must convince them that science and engineering represent the most promising careers for their children.

I've been involved in the science and engineering communities in Canada for most of my life. In all that time, I cannot recall a period when our nation so urgently required the talents of our scientists, our engineers -- the knowledge and talents of professionals from all disciplines -- as we do today. There is no better example of this need than the issue of Global Change. I am counting on the Society to provide the forum in which experts from all disciplines -- from the social to the natural sciences and engineering -- will come together to exchange ideas, develop a common understanding of the scope of the issue, and define integrated solutions to the challenges it poses to Canada and the world community.

We need your energies, your expertise and your ideas if we are to build a competitive Canada for future generations. You all have a great deal to contribute. I look forward to a positive and productive working relationship with the Royal Society of Canada.

COMMUNICATION PRÉSENTÉ AU
COLLOQUE DE L'ACADÉMIE III
PAR
L'HONORABLE WILLIAM C. WINEGARD
MINISTRE d'ÉTAT (SCIENCES ET TECHNOLOGIE)

C'est pour moi un plaisir d'être parmi vous ce matin. Je suis heureux de l'occasion qui m'est offerte de discuter certaines des questions de science et de technologie de l'heure avec un groupe d'éminents professionnels tels que vous. Ma présence ici aujourd'hui et les idées que je m'apprête à partager avec vous arrivent à point nommé, car chacun d'entre vous a un rôle vital à jouer dans le cadre de l'effort national qu'il faudra consentir pour renforcer nos capacités en sciences et en technologie.

Je me trouve ce matin devant un éventail de possibilités. Je fais plus précisément référence à l'annonce de la semaine dernière concernant le financement fédéral accordé à la Société royale. J'ai aujourd'hui l'occasion de lancer un défi à un groupe de professionnels qui, grâce une profusion d'idées et à une expérience étendue, sont en mesure de relever le défi et d'apporter une contribution importante. Je ne suis donc pas venu prêcher ou tenter de vous intimider, je vois plutôt mon rôle comme étant celui d'un motivateur. Il est à souhaiter que mes paroles parviendront à mobiliser les ressources de *tous* les membres et associés de la Société royale.

Avant d'entreprendre cet exercice de motivation, j'aimerais partager avec vous cette citation que j'ai lue récemment. "L'avenir appartient à la science. De plus en plus, celle-ci contrôlera le destin des nations. En fait ce destin est déjà dans ses éprouvettes." Je ne peux revendiquer la paternité de ces paroles bien qu'elles ressemblent à ce que j'ai dit à maintes reprises aux groupes auxquels je me suis adressé dans l'ensemble du pays depuis que j'assume mes responsabilités au Cabinet. Leur parenté est frappante avec ce que nous répètent nos leaders de l'industrie et du milieu universitaire et les hommes et les femmes qui oeuvrent dans les secteurs des sciences et de la recherche. Ces paroles ne viennent toutefois pas non plus d'un président directeur général de société ou d'un doyen d'université. C'est Sir William Osler, enseignant et éminent physicien canadien, qui les a écrites il y a 88 ans dans l'introduction d'une biographie de Pasteur. Sir William a fait preuve d'une grande intuition et je me demande ce qu'il écrirait s'il était avec nous aujourd'hui. J'ai l'impression qu'il serait gêné de constater qu'en pleine période de changement technologique sans précédent nous passions encore beaucoup de temps à faire écho à ses pensées plutôt qu'à prendre des mesures concrètes à partir de celles-ci.

En tant que Canadiens, il y a de nombreuses choses pour lesquelles nous pouvons être reconnaissants. Nous avons en effet édifié une société qui s'occupe des besoins de ses citoyens, un pays qui offre des programmes sociaux généreux, un pays où les possibilités semblent illimitées. Dans une large mesure, nous devons ce que nous possédons aujourd'hui aux sciences et à la technologie. L'énergie et la détermination des nos scientifiques et de nos ingénieurs -- particulièrement au cours des années de l'après-guerre -- nous ont faconnés tels que nous sommes aujourd'hui.

Le défi auquel nous devons faire face consiste à devenir une société beaucoup plus concurrentielle. Si nous n'y parvenons pas, nous risquons de perdre cette société sensible à nos besoins dont nous sommes si fiers. La force économique d'aujourd'hui réside dans les idées et l'innovation, les sciences et la technologie. La connaissance est sans aucun doute devenue la principale richesse -- en fait la base même de la richesse -- du monde d'aujourd'hui.

Les efforts que nous déployons dans les domaines des sciences, de la recherche et développement, et de la mise au point, de l'acquisition et de l'application de technologies doivent viser l'excellence. Nous devons aussi nous surpasser au chapitre de la gestion commerciale et industrielle, où nous devons être innovateurs et créatifs et à celui de commercialisation de nos biens et services à l'échelle mondiale. Et nous devons promouvoir l'excellence dans le perfectionnement des compétences personnelles à tous les échelons du système d'instruction. Il y a toutefois une exigence prépondérante. Non seulement nous devons atteindre et maintenir l'excellence dans ces différentes entreprises, mais nous devons aussi les intégrer dans un effort national que poursuivent les milieux scientifiques, technologiques et d'affaires, ainsi que les gouvernements à tous les paliers.

Le gouvernement a pour sa part reconnu le rôle intégral que peut et doit jouer la Société royale à titre d'académie nationale du Canada, dans cet effort d'envergure. C'est pourquoi nous avons pris les mesures voulues pour vous appuyer financièrement. La Société royale du Canada possède un vaste champ d'expertise dans tous les domaines de la science. Même si le vôtre constitue une tradition digne de reconnaissance, il n'a que peu influé sur notre décision de vous fournir une aide financière. Notre décision repose sur le fait que la renommée et l'objectivité des membres et associés de la Société ainsi que l'étendue de leur expertise en font le seul organisme capable d'assumer certaines tâches essentielles. Lorsque nous avons rendu notre décision, nous avons misé, sans fausse honte, *sur des possibilités*.

Nous savons tous que le programme économique actuel du gouvernement pourrait se résumer en deux mots : *restrictions financières*. En d'autres termes, le gouvernement fait face à plus de demandes qu'il n'en peut accepter, tout en demeurant décidé à réduire le déficit. Lorsque nous devons répondre à une demande d'aide, de nature financière ou autre, les circonstances nous obligent à évaluer soigneusement nos priorités. J'entends par là les questions liées au bien-être socio-économique de la nation.

A notre avis, la Société royale fournit une contribution importante à l'égard de nos objectifs économiques et sociaux. Mais en même temps, nous sommes conscients que vous devez régler rapidement certains problèmes administratifs internes avant de pouvoir assumer efficacement un rôle accru. Je soulignerais, en particulier, la consolidation de votre processus de planification, et je fais référence, notamment, à votre plan d'activités ainsi qu'à ceux de l'évaluation de la recherche et de l'attribution de bourses pour la promotion des femmes. Il est essentiel que le consensus auquel vous parviendrez par l'entremise de ce processus de planification regroupe l'ensemble des membres de la Société royale.

Le succès de vos efforts reposera aussi, dans une large mesure, sur l'efficacité des consultations que vous mènerez auprès des sociétés savantes et des représentants des milieux scientifiques, de recherche et d'études. Il est clair qu'un de vos plus grands atouts, soit la vaste gamme d'expertise que possèdent vos membres et associés, peut croître substantiellement grâce à un processus de consultation minutieux. Je crois que la volonté de mener des consultations *sur une base continue* contribuera aussi aux objectifs que vous vous êtres fixés dans votre campagne de levée de fonds auprès des provinces et du secteur privé.

Je mentionnais, il y a quelques instants, vos plans d'évaluation de la recherche et d'attribution de bourses pour la promotion des femmes en sciences. J'aimerais parler un peu plus de ces questions. Je sais que vous amorcez la mise en oeuvre de votre plan d'évaluation de la recherche et que vous débuterez par l'examen de la recherche universitaire. Les résultats de cet examen intéresseront grandement non seulement le gouvernement fédéral, mais le secteur privé ainsi que les milieux de recherche. Comme vous le savez peut-être, le Comité des universités que préside Pierre Lortie et qui relève du CCNST a recommandé que la recherche universitaire au Canada fasse régulièrement et publiquement l'objet d'une surveillance et d'une évaluation par rapport à celle d'autres pays. La Société royale est tout à fait en mesure d'assumer cette tâche qui, je le reconnais, est gigantesque. Le fait que votre société compte parmi ses membres les esprits les plus brillants du pays dans toutes les disciplines,

et qui ont accès à tous les secteurs ainsi qu'à la collectivité internationale, vous rend particulièrement apte à vous attaquer à cette tâche.

La Société pourrait jouer un rôle également important au titre de la promotion de la femme dans la vie intellectuelle canadienne. Le gouvernement accorde une grande importance à la participation des femmes en sciences naturelles et en génie, deux domaines où elles continuent d'être sous-représentées. Le fait d'attribuer à des femmes au moins la moitié des Bourses Canada pour les études de premier cycle en sciences naturelles, en génie et dans des disciplines connexes est un exemple qui illustre notre volonté d'apporter des changements dans ce secteur. Vous savez peut-être aussi que le Conseil de recherche en sciences naturelles et en génie (CRNSG) adopte des mesures pour inciter les femmes à poursuivre des études supérieures et à obtenir des bourses post-doctorales dans ces disciplines. Votre plan visant l'attribution de bourses d'études pour la promotion des femmes constitue un excellent point de départ. J'espère que toutes ses recommandations seront mises en oeuvre, notamment l'engagement à accélérer le rythme de la nomination et de l'élection de femmes comme membres de la Société. Il me tarde le lire votre publication sur les réalisations de vos membres féminins. Pourquoi ne pas élargir cet effort et y inclure des articles sur d'autres femmes qui ont apporté une contribution exceptionnelle au Canada?

J'applaudis également votre projet d'envoyer des femmes professionnelles de renom dans les écoles, comme exemples à suivre. Plus les membres de la Société entreront en interaction avec le grand public, plus vous pouvez espérer réussir à le sensibiliser aux sciences et à la technologie et à mieux lui faire comprendre ce domaine. Vous avez un rôle important à jouer à cet égard -- *chacun de nous* doit s'efforcer d'intégrer les sciences à notre culture. Nous devons convaincre un plus grand nombre de Canadiens qu'il est nécessaire que la population active possède des connaissances technologiques pour soutenir ou accroître la prospérité nationale. Nous devons les convaincre que les sciences et le génie offrent les carrières les plus prometteuses pour leurs enfants.

J'ai pratiquement toujours oeuvré dans les secteurs des sciences et de l'enseignement au Canada et je ne peux me rappeler une période où notre pays a eu besoin d'une façon aussi urgente des talents de nos scientifiques et de nos ingénieurs, des connaissances et des talents de nos professionnels de toutes les disciplines. La question du changement global illustre parfaitement ce besoin. Je compte sur la Société pour fournir une tribune où les experts de toutes les disciplines -- des sciences sociales et naturelles au génie -- se rencontreront pour échanger des idées, élaborer

une façon commune de voir l'ampleur de la question, et définir des solutions judicieuses aux défis qu'elle pose au Canada et au monde.

Nous avons besoin de votre énergie, de votre savoir-faire et de vos idées pour pouvoir bâtir un Canada concurrentiel pour les générations à venir. Votre contribution est essentielle. Je sais que je peux compter sur des rapports de travail positifs et productifs avec la Société royale du Canada.

Publications of the Royal Society of Canada Publications de la Société royale du Canada

Proceedings and Transactions

The *Proceedings* and the *Transactions* appear annually in two separate volumes. Fellows receive copies of the current issues without charge. For current issues the prices to non-Fellows are $6.75 for *Proceedings* and $13.50 for *Transactions*. Some earlier volumes are available for purchase at prices depending on scarcity and condition. Inquiries and orders should be sent to the Royal Society of Canada, P.O. Box 9734, Ottawa, Ontario, Canada K1G 5J4.

Délibérations et Mémoires

Les *Délibérations* et les *Mémoires* paraissent chaque année en deux volumes distincts qui sont distribués gratuitement aux membres. Le grand public peut acheter les dernières livraisons des *Délibérations* à 6,75$ l'exemplaire et les *Mémoires* à 13,50$. Il est encore possible de commander certains volumes antérieurs, le prix dépendant de l'état de la publication et du nombre d'exemplaires disponibles. Prière d'adresser toutes demandes de renseignements ou toutes commandes à la Société royale du Canada, P.O. Box 9734, Ottawa (Ontario) Canada K1G 5J4.

Calendar / Annuaire

The *Calendar* is published annually. It contains a complete listing of Fellows, alphabetically and by Academy (discipline or division); Officers of Council, Executive, Society and Academy Committees; in addition to schedules for the coming year and information and guidelines about symposia, donations, publications, prizes, awards and lectureships, and other Society activities. It is free to members. The cost for non-members is $3.75.

L'*Annuaire* est une publication annuelle dans laquelle sont publiées les listes des membres du Conseil d'administration et de l'Exécutif de la Société royale du Canada et de chacune des académies. On y trouve également une liste complète des membres par ordre alphabétique et par

académie (discipline/division), un calendrier pour l'an prochain et l'information concernant les symposia, les dons, les publications, les prix et les distinctions, et les autres activités de la Société. Cette publication est offerte gratuitement aux membres et est disponible aux non-membres pour la somme de 3,75$.

Corporate Plan / Plan d'ensemble

This was first published in 1989 and will be updated annually. It is free to members; the cost to non-members is $6.00.

Le *Plan d'ensemble* vient d'être publié pour la première fois en 1989 et sera mis à jour annuellement. Offerte gratuitement aux membres, cette publication est disponible aux non-membres pour la somme de 6,00$.

Présentations

Cette publication réunis les discours de présentations des nouveaux membres de l'Académie I par leurs parrains et les réponses de ces membres dans lesquelles ils traitent de leur oeuvre ou d'un autre sujet de leur choix.

Publiée chaque année. Tous les numéros du premier en 1945-46 à date sont disponibles. Les numéros 39 à 42 coûtent 6,00$ l'exemplaire. La série complète coûte 80,00$ (frais d'envoi compris).

Index 1882-1982

The *Index* consists of author and subject entries for all papers published in the *Transactions* and other publications of the Society. Available for $30.

L'*Index* auteurs-matières renvoie ainsi à toutes les communications des *Mémoires* et d'autres publications de la Société. Prix: 30,00$.

Studia Varia

Most volumes are now out of print. Those volumes that are available through the Royal Society are listed below. All others continue to be available through the on-demand publishing programme of University Microfilms, Ann Arbor, Michigan, U.S.A. A list of these are available from the Society.

La plupart de ces volumes sont épuisés sauf les titres indiqués ci-dessous qui sont disponibles au Secrétariat de la Société. On peut se procurer les autres volumes en s'adressant à University Microfilms, Ann Arbor,

Michigan, U.S.A. On peut obtenir de la Société la liste des volumes épuisés.

Canadian Population and Northern Colonization, V.W. Bladen, ed., 1962, pp. 168, $4.50

Water Resources of Canada/Ressources hydrauliques, C.E. Dolman, ed., 1967, pp. 249, $8.50

Visages de la civilisation au Canada Français, L. Lamontagne, éd., 1970, pp. 130, SBN 8020-1659-6, $7.50

Le Canada français d'aujourd'hui, L. Lamontagne, éd., 1970, pp. 161, SBN 8020-1658-8, $7.50

Special Publications

Collections of specialized scientific papers on a single theme or related themes have been published for the Society from time to time. Inquiries should be directed to the Secretariat. A list of out-of-print volumes may be obtained from the Society; these volumes are available through the on-demand publishing programme of University Microfilms, Ann Arbor, Michigan, U.S.A.

Publications spéciales

On a publié de temps en temps, pour le compte de la Société, des collections d'ouvrages portant sur un thème unique ou sur des questions connexes. Veuillez adresser toute demande d'information ou toute commande au Secrétariat. On peut obtenir de la Société la liste des volumes épuisés; ces volumes sont disponibles sur demande à University Microfilms, Ann Arbor, Michigan, U.S.A..

Soils in Canada, Robert F. Legget, ed., 1961, water damaged copies, pp. 240. ISBN 0-8020-1351-1. $5.50

Marine Distribution, M.J. Dunbar, ed., 1963, pp. 110, $5.00

Studies in Analytical Geochemistry, Denis M. Shaw, ed., 1963, pp. 139, $5.95

Geochronology in Canada, F. Fitz Osborne, ed., 1964, pp. 156, $5.95

Appalachian Tectonics, T.H. Clark, ed., 1967, pp. 99, $6.50

The Earth Sciences in Canada: A Centennial Appraisal and Forecast, E.R.W. Neale, ed., 1968, pp. 259. SBN 8020 15239. $8.50

Glacial Till - An Interdisciplinary Study, Robert F. Legget, ed., 1976, pp. 412. ISBN 0 920064 11 6. $15.00

Energy Flow - Its Biological Dimensions (The IBP in Canada 1964-1974), T.W.M. Cameron and L.W. Billingsley, eds., 1975, pp. 322. ISBN 0 920064 05 1. $5.00

Nuclear Issues in the Canadian Energy Context, E.P.Hincks, ed., 1979, pp. 279. ISBN 0 920064 13 2. $8.00

Nuclear Winter and Associated Effects: A Canadian Appraisal of the Environmental Impact of Nuclear War/L'hiver nucléaire et ses effets connexes, F.K. Hare and A. Forester, eds., 1985, pp. 382. ISBN 0 920064 21 3. $15.00

Planet Under Stress: The Challenge of Global Change/La Terre en péril: Métamorphose d'une planète, Constance Mungall and Digby J. McLaren, eds., 1990. ISBN 19 5407318. pp. 352, published and sold by Oxford University Press/ISBN 2-7603-0287-3. pp. 448, publié et vendu par Les Presses de l'Université d'Ottawa, $18.95.

Proceedings of Symposia / Comptes rendus des colloques

These volumes, consisting of papers presented at symposia held from time to time by the Society, are published, in most cases, as simply as possible to keep costs to a minimum and to ensure rapid publication. The contents in all cases are presented in English or French, depending on the language of the speaker. They are sold by the Secretariat of the Society unless indicated otherwise.

Ces volumes réunissent les communications qui sont présentées aux colloques que la Société organise de temps en temps: aux fins d'en réduire le coût et d'en assurer l'actualité; elles paraissent, la plupart du temps, sous une forme aussi simple que possible, en anglais ou en français, selon la langue utilisée par le conférencier. On peut se les procurer au Secrétariat de la Société sauf cas spécial.

1 *The Tundra Environment*, F. Kenneth Hare, ed., 1970, pp. 54, $2.00
2 *Mercury in Man's Environment*, J.E. Watkin, ed., 1971, pp. 201, $5.00
3 *Communications into the Home/Communications au foyer*, W.C. Brown, ed., 1972, pp. 196, $3.00
4 *Futures Canada/L'avenir du Canada*, J. T. Wilson, ed., 1973, pp. 71, $2.00
5 *Physics and Chemistry of Ice*, F. Whalley, S.J. Jones and L.W. Gold, eds., 1973, pp. 403, $10.00 (Bound/relié)
6 *Energy Resources*, K.J. Laidler, ed., 1973, $10.00
7 *Copernicus*, P. Wyczynski, ed., 1973, pp. 164. Sold by/Vendu par FIDES, $8.00
8 *Waste Recycling and the Environment*, P. Reynolds, ed., 1974, pp. 290, $7.00
9 *Le Rapport Parent, dix ans après*, L.-P. Audet, éd., 1975. Sold by/Vendu par La Maison Bellarmin, $5.00
10 *Frontiers and Limitations of Knowledge/Frontières et limites du savoir*, C. Fortier, éd., 1975. $4.00
11 *The Patterns of Amerindian Identity/Les facettes de l'indentité amérindienne*, M.-A. Tremblay, éd., 1976. ISBN 0920064 04 3. Sold by /Vendu par Les Presses de l'Université Laval. $13.50

12 *Problems of Development in Atlantic Canada*, S.D. Clark, ed., 1976, pp. 181. ISBN 0920064 01 9. $5.00

13 *Preserving the Canadian Heritage/La préservation du patrimoine canadien*, K.J. Laidler, ed., 1975, pp. 191. ISBN 0920064 00 0. $5.00

14 *The University of the Future* (Summary of discussions)/ *L'université de l'avenir* (résumé des discussions), Jan Morgan and K.J.Laidler, eds., 1976, pp. 50 (Free distribution/ distribution gratuite)

15 *New Perspectives in Canadian Archaeology/Nouvelles perspectives de l'archéologie canadienne*, A. G. McKay, ed., 1976, pp. 258. ISBN 0920064 06 X. $5.00

16 *Canada and World Food*, W.S. Henderson, ed., 1977, pp. 302. ISBN 0920064 07 8. Sold by/Vendu par Agricultural Institute of Canada. $8.00

17 *Shifts in the Balance of Canada's Resource Endowments*, R.E. Folinsbee, ed., 1977, pp. 118. ISBN 0920064 10 8. $4.00

18 *Parasites, Their World and Ours*, A.M. Fallis, ed., 1977, pp. 262. ISBN 0920064 08 6. $6.00

19 *Planetary Atmospheres/Atmosphères des planètes*, A. Vallance Jones, ed., 1977, pp. 170. ISBN 0920064 09 4. $6.00

20 *Hermes (The Communications Technology Satellite): Its Performance and Applications/Hermès (Le Satellite technologique de télécommunications): son fonctionnement et ses applications*, 3 vols, I. Paghis, ed., 1978, pp. 867. ISBN 0 920064 12 4. $25.00

21 *Glacier Beds: The Ice-Rock Interface, 1979*, as Vol. 23, No. 89, 1979. Published and sold by/Publié et vendu par International Glaciological Society, Cambridge, CB2 BIER, England. 20

22 *The Written Word/Prestige de l'écrit*, A.G. McKay, ed., 1980, pp. 165. ISBN 0920064 14 0. $7.00

23 *A Century of Canada's Arctic Islands, 1880-1980/Un siècle des îles arctiques du Canada, 1880-1980*. Morris Zaslow, ed., 1980, pp. 358. ISBN 0 920064 15 9. $20.00

24 *Continuité et rupture. Les sciences sociales au Québec*, 2 volumes, Georges-Henri Lévesque et autres, éds, 1984, pp. 671. ISBN 27606 0682 1. Sold by/Vendu par les Presses de l'Université de Montréal, $36.00

25 *Ethanol fro.n Biomass*, H.E. Duckworth and E.A. Thompson, eds. 1983, pp. 654. ISBN 0 920064 17 5. $20.00

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